THIS IS YOUR LIFE, ACER MAPLE
A Learning Package

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ACKNOWLEDGEMENTS

Special thanks to Nancy J. Tolli who designed the original "This Is Your Life, Acer Maple" cast of puppets and who adapted these designs for use in the classroom.

Through the cooperation of Margaret Gillespie, coordinator for Project Learning Tree in New Hampshire, and the teachers who attended our workshops, we were able to test our ideas and improve our instructions while having a great deal of fun.

Thanks to the Children's Television Workshop for providing the spark for the play and permission to develop it.

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INTRODUCTION

THIS IS YOUR LIFE, ACER MAPLE is a multidisciplinary learning package designed for children in elementary grades three to six. The package includes instructions for children, with some help from adults, to create puppets characters in the classroom; the script for the play, "This Is Your Life, Acer Maple"; the script for the "Life, Death and Rebirth of Trees" slide show; recipes for Tree Treats. Also, we suggest several Project Learning Tree activities that are appropriate for the package, especially "Adopt A Tree". We include an activity called "Incredible Trees" and instructions for making classroom tree decorations. A set of 60 slides for the "Life, Death, and Rebirth of Trees" program and a videotape production of "This is Your Life, Acer Maple", which come with a color poster, can also be ordered (see p. 100).

We hope that you will find this educational package to be of high quality, clarity, and fun for the children. The material is age appropriate and flexible enough to give you freedom to explore it and supplement it as you wish. The directions for making the puppets should be easy for most children to understand with some assistance. You may want to make reading the directions a separate lesson in preparation for constructing the puppets. Pull out vocabulary words from the instructions to be sure the children understand their meaning. Some of the designs can be executed in a class period, but others, such as the tree costume, will take longer because they are fairly complex.

The materials chosen for the puppets are purposely inexpensive and easily obtainable. More expensive materials can be used but we did not want cost to be a consideration in mounting the production of the play. Most of the materials are paper products being recycled - a point that should be made to the children. Feel free to experiment with other materials and encourage the children to adapt the designs in any way their creativity suggests. Consider the instructions a basic jumping-off point for their imaginations.

The script for the play is not complicated. Two characters have extensive parts but most characters have only two or three lines. These smaller parts should not be too difficult for even a reticent child to master. As with the puppet-making instructions, the script could

become a reading lesson. While reading the script for understanding, you may want to generate some discussion about why certain characters are included: what their relationship to the tree is and what effect they have on the environment. The children may want to add new characters like their state bird, state tree, or animals and insects. Maybe even a person! In fact, if maples are not common or well known in your area, change the main character to one that is. We encourage all of this. Let the children make the play their own.

A Spanish translation of the script is included in the package. If your class has many Spanish speakers, or if your curriculum includes Spanish, you might enjoy producing this alternative version of the play, for fun or as part of a language lesson. Other classes might initiate their own "language lessons" by comparing the two versions and learning a limited Spanish vocabulary.

The slide show is intended to give an overview of the life cycle of trees. It is intended as introductory material for the exploration of trees in the environment. The topics mentioned can be expanded and discussed with the children. For a teacher interested in science, experiments can be designed. The children could germinate tree seeds and watch the roots and leaves develop. The best seeds to use are those from common native trees. The class could make a collection of tree seeds or tree flowers, using field guides to identify them. Dye experiments help children observe how trees absorb water and how the transport system works. Celery is good for this. The children could experiment with light, forcing a tree to grow toward it or comparing trees deprived of light with trees given adequate light. The same experiments could be done with water deprivation or element deprivation. The children could compare the growth of a tree in sterile soil and then observe what happens when they add phosphorous, and nitrogen, and potassium (the components of the most common fertilizers). These are straightforward inexpensive experiments.

There are also many observation skills to be learned. The Project Learning Tree materials are helpful with those. Please reference your PLT books for more ideas.

Have fun!

H. Sharon Ossenbruggen

MAKING THE PUPPETS

FORWARD TO TEACHERS' PUPPET MAKING PACKAGE

This package of instructions has been devised to allow children to use their creative abilities, imagination, and reading skills in producing the puppets. Easily obtained, inexpensive, recyclable materials have been used to minimize costs. One exception is the glue. Some white glue is slow drying and messy. In my experience a thicker, quick-bonding glue such as "Tacky" or "Sobo" works best.*

The instructions are written with the intention that teachers and children, working together in groups, will be able to understand each step without too much difficulty. The children's reactions and ability ranges will vary widely. Creativity should be encouraged. Younger children will require more assistance, while older children can work more independently. This is a fun learning experience that involves science, math, reading, problem solving, and art.

Nancy J. Tolli
Puppet Designer

*Mention of brand names in this publication does not constitute endorsement by the Forest Service or the U.S. Department of Agriculture.

THE SUN

THE SUN

SUPPLIES NEEDED: Yellow poster board, oak tag, or 18"x24" construction paper.

Craft paper or very large, heavy shopping bags (18" or larger)

Poster paints (yellow, orange, red), crayons, and/or magic markers

Ruler

Scissors

Pencils

String

Construction paper (yellow, orange, red)

Newspapers - to protect table when painting

Glue (Tacky, Sobo)

Masking tape

Stapler

OPTIONAL SUPPLIES: Gold metallic paper

Gold fabric scraps

Rickrack

Sequins or glitter

INSTRUCTIONS: The Sun mask puppet is worn over your head with an opening for your face. For the play, you could wear yellow clothing to be part of the Sun's glow or all black or brown to blend into a background. You may want to paint your face.

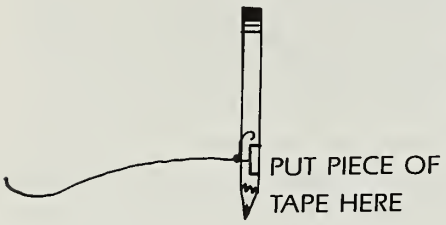


Fig. 1

1. Lay a large piece of paper on a flat surface.
2. Cut a length of string 12" long and tie one end of it in a double knot around a pencil close to the pointed end. Tape the tied string in place on the pencil so it doesn't slip off. See Figure 1.

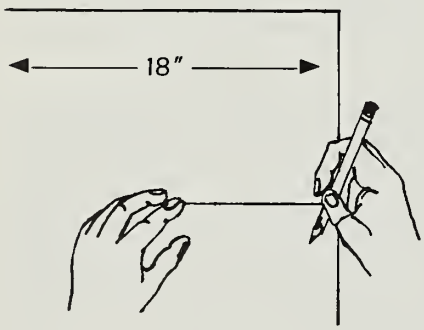


Fig. 2

3. Hold loose end of the string with your fingers flat on the center of the large paper. When you stretch out the string with the attached pencil, the pencil point should come close to the edges of the paper. Mark the center (where your finger is holding the end of the string) with a pencil dot. See Figure 2.
4. Hold the string firmly on the center dot and keep the string pulled tight. Draw a circle on the paper with the pencil. Circle should be about 18" in diameter.
5. Lay the pencil with the attached string on top of a ruler so that the pencil point is at the 4" mark and the string is to the left. With pen or marker draw a dot on the string to mark a 4" length. See Figure 3.

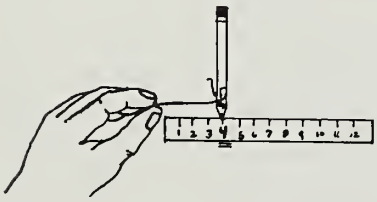


Fig. 3

6. Line up this dot on the string with the center dot of your large circle. Holding the string tight, draw a circle around the point that you are holding down with your opposite hand. See Figure 4.

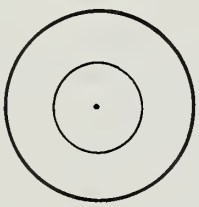


Fig. 4

7. Cut around the edge of the large circle, and then cut out the smaller center circle. This center circle is where your face will show through when you wear the Sun. This will be the front of the puppet.

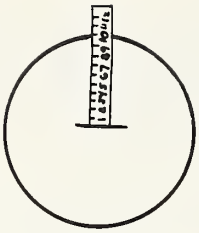


Fig. 5

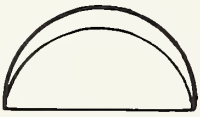


Fig. 6

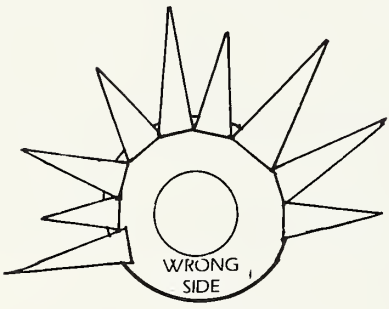


Fig. 7

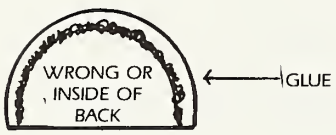


Fig. 8

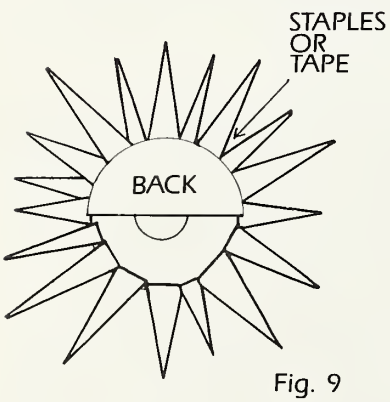


Fig. 9

8. Draw another large circle by tracing around the outside edge of the first Sun. Cut this second circle out. **Do not make the smaller circle in the center.**

9. Place a ruler so that the 10" mark lines up with the outside edge of this second cut out circle and draw a line where the ruler ends. See Figure 5. Remove ruler and fold across on this line. See Figure 6. Then cut on the folded line and throw away the small part of the cut circle. The remaining piece is the back of the puppet.

10. Paint or color the front and the back of the Sun, unless you have used colored poster board. You do not need to draw a face since your face will be the Sun's features. You may wish to use face paint to emphasize eyes and mouth or to paint on designs.

11. Use pattern A or B or design your own "sun rays" out of construction paper, metallic paper, felt, or any other suitable material.

12. Glue these rays all around the edge on the inside of the Sun's front piece. See Figure 7. You may want to paint designs on the rays or decorate them with glitter, rickrack, or sequins. In that case you may need to reinforce the rays with cardboard.

13. After these rays have completely dried, glue the inside of the Sun's back to the inside of the Sun's front. Put the glue only along the curved outside edge of the Sun's back piece. See Figure 8.

14. Allow puppet head to completely dry. You may need to staple or tape the front to the back at the bottom two sides to reinforce it. See Figure 9.

15. Slip the puppet over your head and you are now the Sun!

RAINCLOUD

RAINCLOUD

SUPPLIES NEEDED: Kraft paper or 18" x 24" poster board (gray, if available)

Poster paint - gray, black, dark blue

Ruler

Pencils

Scissors

String or yarn

Construction paper

Newspaper

Glue

Masking tape

White or blue tissues or cottonballs

Aluminum foil and/or plastic wrap

Stapler

OPTIONAL SUPPLIES: Silver glitter

Fiberfill stuffing for toys

Silver sequins

Plastic bags

INSTRUCTIONS: Raincloud mask is to be worn over your head with an opening for your face to show through. For the play, you could wear white, gray, blue, or black clothing to complement the raincloud's coloring. You may want to paint your face with lightening bolts or other designs.

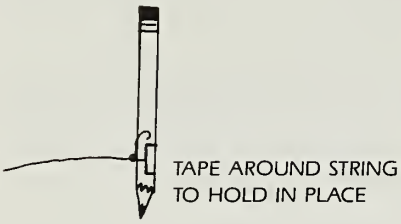


Fig. 1

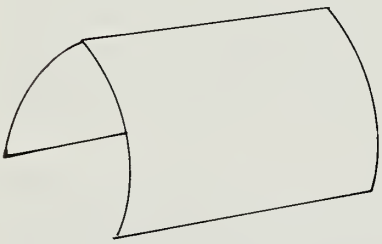


Fig. 2

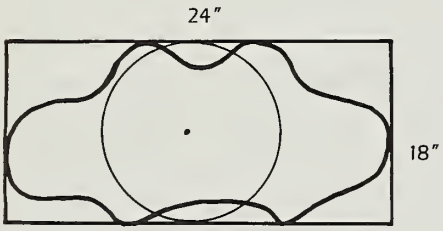


Fig. 3

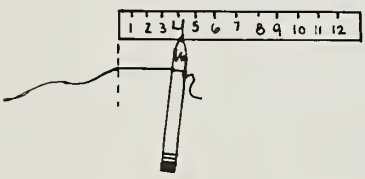


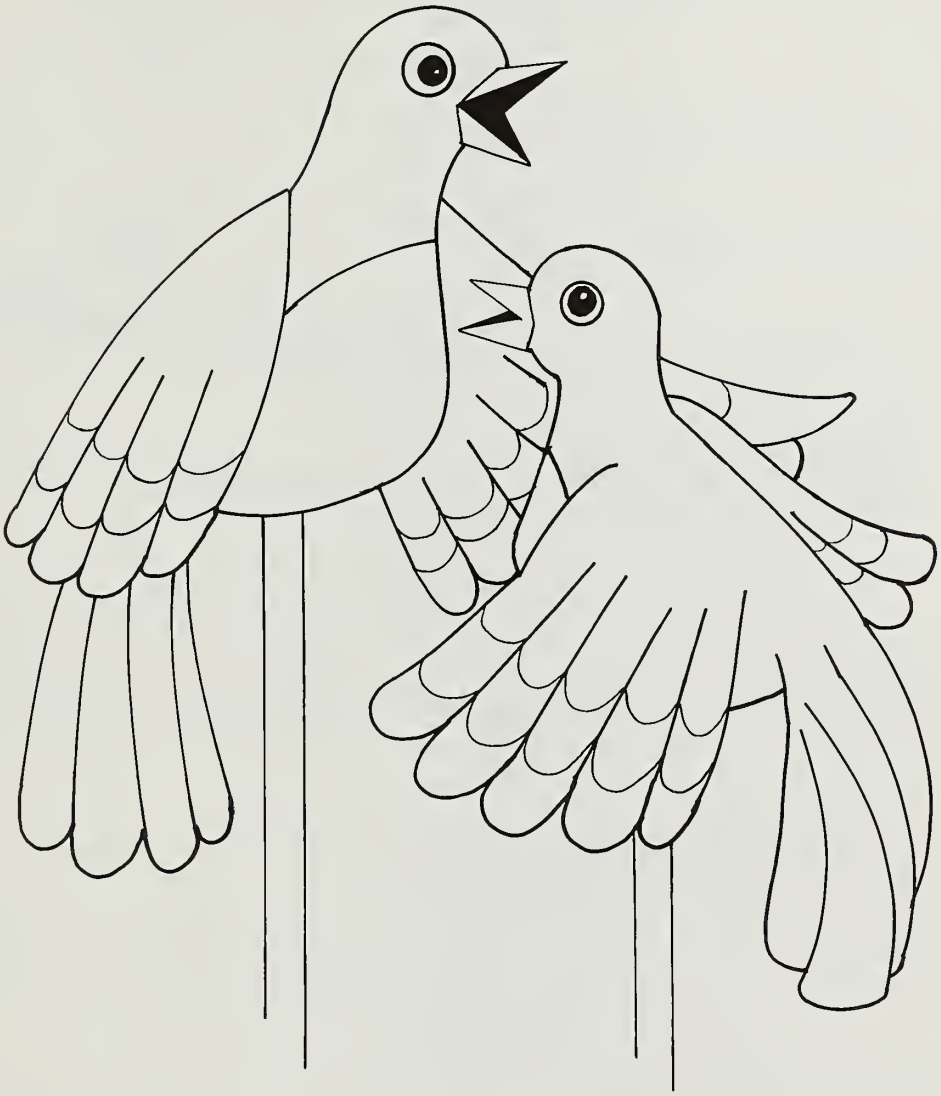
Fig. 4

1. Take a piece of paper cut to 18" x 24". Lay it on a flat surface.
2. Cut a piece of string 12" long. Tie one end in a double knot around a pencil close to the lead end. Tape string down to hold in place on the pencil. See Figure 1.
3. To find the center of the 18" x 24" paper, fold the paper in half, **but don't crease the fold all the way down - just pinch it near the middle.** Open the paper and fold in the other direction, and do the same as the first fold - creasing only near the center. The two creased lines should cross at the exact center. Mark it with a pencil dot. See Figure 2.
4. Place the end of the string on the center dot of the paper.
5. Hold the string firmly on the center dot and, keeping the string pulled tight, draw a circle on the paper.
6. Now using this circle as your guide, draw puffy cloud cheeks on each side of the circle. Reshape to make it look like a raincloud. See Figure 3.
7. Lay the pencil with the attached string on top of your ruler so pencil point is on the 4" mark and the string is pulled to the left. Make a mark on the string where it meets the end of the ruler. See Figure 4.

Fig. 5

8. Line up the mark on the string with the center dot on the Raincloud. Holding this part of the string down firmly, draw a small circle the same way you made the large one.
9. Now cut out the Raincloud around the outer edges. Also, cut out the inner circle which is where your face will show through when you wear the cloud.
10. On another 18" x 24" paper, measure 13" up from the long (24") edge. Draw a pencil mark. Line up the top of your cut-out Raincloud with this mark and trace around the ouside edges. This will be the back of the Raincloud. Cut it out. See Figure 5. Do not trace the small center circle.
11. Paint and decorate the front section of your cloud, using various materials and your imagination. Puffy cheeks of cottonballs or tissue puffs, aluminum foil lightening, plastic wrap for the wet look, or glitter are just a few possibilities.
12. Paint the outside of the cloud back also. Let sections dry.
13. Glue the inside back to the inside front, putting the glue along the edges only (unpainted) of the back section. After the glue dries, you may need to staple the edges where the back meets the front to reinforce it.
14. Use pattern A for raindrops or design your own drops. Aluminum foil, construction paper, or plastic could be used. Attach to the bottom edge of the front, using strips of plastic, string, or yarn.
15. After everything dries, the Raincloud is ready to wear.

MR. AND MRS. ROBIN



MR. AND MRS. ROBIN

SUPPLIES NEEDED:

- Pencils or small wooden dowels
- Scissors
- Masking tape or scotch tape
- Glue (Tacky or Sobo) or paste
- 2 paper lunchbags - 5" x 10-3/4"
- Newspaper
- Black or brown crepe paper - folded sheets
- Orange, black or brown, and yellow construction paper

OPTIONAL SUPPLIES:

- Black or brown tissue paper (for wings and tail)
- Small yellow buttons or beads or seeds (for eyes)
- Orange and yellow felt (for chest and beak)

FOR PAPIER-MACHE:

- Newspaper or paper toweling (cut in strips)
- Wallpaper paste or flour paste
- Poster paints

INSTRUCTIONS: For each Robin:

Fig. 1

1. Use 1 full-size sheet of newspaper (both pages) and wad it up in a ball.
2. Open the lunch bag and put the wadded newspaper ball inside the bag. Squeeze the paper bag around the newspaper ball to form the bird's body, leaving the top of the bag open. See Figure 1.
3. Tear one full-size sheet of newspaper in half and squeeze into a ball for the bird's head.
4. Put paper ball inside the paper bag, placing it next to the larger newspaper ball.

Fig. 2

5. Squeeze the top of the paper bag around the "head" and tape closed with masking tape or scotch tape. Tape down any area of the "bag bird" that needs to be secured. Works best if two people work together. The body should be about 7" head to tail. See Figure 2.

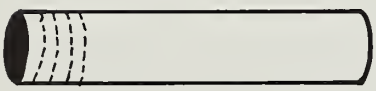


Fig. 3

6. Cut two 1-inch strips of black or brown crepe paper across the folded edges. This can be done by the teacher with a paper cutter or with heavy scissors. See Figure 3.
7. Tape or glue down one end of the paper strips anywhere on the bird body. Wind the paper around the body, stretching the strip as you wind it in different directions over body and head. It will be like wrapping a mummy.
8. Glue down end of crepe paper when finished, using a small amount of glue or paste.
9. Use glue to start the second paper strip. Continue wrapping until all of bird is covered. It should take about two long strips of crepe paper for each bird. Some hard-to-reach areas of the body can be patched with small glued strips of crepe paper stretched over the bare spots.

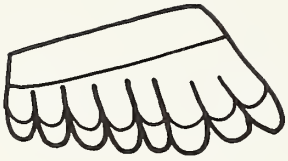


Fig. 4

Fig. 5

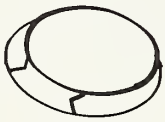


Fig. 6

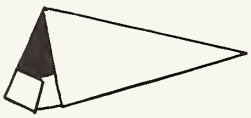


Fig. 7

10. Glue any crepe paper edges that are loose.

11. From black or brown construction paper (whatever color crepe paper you used) cut two wings and one tail using patterns A and B, or design your own.

12. More feathers may be added to the wings and tail using either crepe paper, tissue paper, or construction paper.

    a. Use pattern C and D to cut extra feathers. Cut through two or three layers of crepe, tissue, or construction paper at a time.

    b. Glue extra feathers to wings, starting near the bottom.

    c. Add as many feathers as you would like, trimming feathers that go over the edge of wing A. See Figure 4.

    d. **Make sure you have a right and a left wing. See Figure 5.**

    e. Glue wings and tail to the bird's back.

13. The chest may be painted orange or a chest may be cut out of construction paper (or felt). Use pattern E. Cut the four slits, overlap and glue so it looks like a turtle shell. See Figure 6.

14. Cut out beak pattern F and trace around it **twice** on yellow construction paper.

15. Fold both beak pieces down the center. Fold tabs toward the inside of beak, overlapping slightly. Glue the two tabs together. See Figure 7.

16. Do other part of beak and glue the two beak parts to the front of the bird's head.

17. Paint eyes or cut out of construction paper and glue to each side of the head. Buttons, seeds, or beads may also be used.

18. Push pencil or dowel part way into tummy of bird as a holder. Robin is complete.

RECIPE FOR PAPIER-MÂCHÉ FLOUR PASTE:

Mix to cake batter consistency the following:

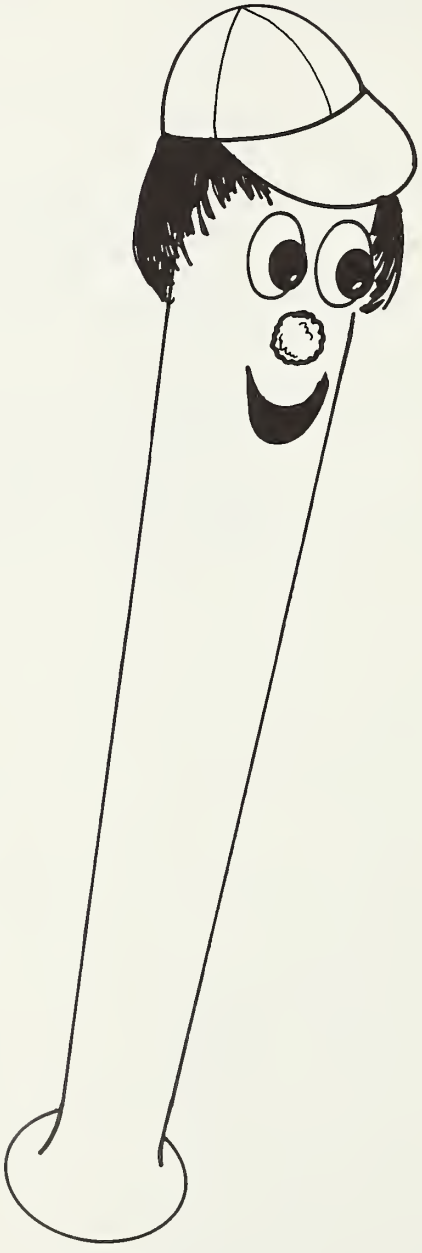
1/2 cup of flour

3/8 cup of water

PAPIER-MÂCHÉ INSTRUCTIONS:

1. Follow steps 1-5 for regular bird.
2. Tear strips of newspaper or paper towel into small sections no more than 1" by 6".
3. Dip into flour paste or wallpaper paste and lay overlapping strips over bird body. Have at least two layers of strips.
4. Let bird dry. When completely dry, it can be painted to look like a robin.
5. Then follow steps 11-18 to complete Robin. You may have to start a hole for the pencil or dowel with the sharp point of a pair of scissors. This will need the teacher's assistance.

WHITEY ASH



WHITEY ASH

SUPPLIES NEEDED: Baseball bat

Scissors

Pencil

Felt or fabric and tissues

Needle and thread

Masking tape

Glue

Yarn or colored tissue paper for hair

Buttons, pompoms, rickrack, or other materials useful for eyes, nose, and mouth

ALTERNATE MATERIALS: Cardboard tubing from wrapping paper, or aluminum foil, etc. Should be at least 18".

Foam packing material (looks like a mushroom cap)

Paint - tan or brown

Same supplies as for real bat (see above)

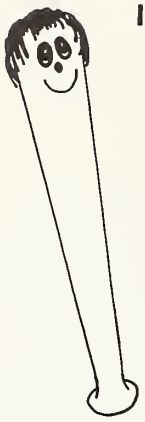


Fig. 1

INSTRUCTIONS:

1. Decorate the top of the bat, using yarn or fringed tissue paper for hair. You need only to tape or glue "hair" around the top edge of bat. The very top of the bat is where the hat will be placed.
2. Add eyes, nose, and mouth using whatever materials you think would be best (buttons, pompoms, felt, or rickrack, etc.). See Figure 1.
3. Use patterns A and B to make a hat. Cut one "A" and one "B"of felt or fabric. Mark on piece "B" numbers 1,2,3,4, exactly the way the pattern is.
4. Using piece "B", fold it in half so 1 is on the right and 2 is on the left. Sew from 1 to 2, along dotted line about 1/8" from the edge, knotting the thread at each end. See Figure 2.
5. Fold in half so you see numbers 3 on the right and 4 on the left. Sew, following the dotted lines of pattern about 1/8" from the edge, knotting the thread at each end as above. See Figure 3.
6. Turn hat inside out, stuff with some tissues or cotton balls. Glue or sew to pattern A. See Figure 4.
7. Glue or tape whole hat to Whitey's head.

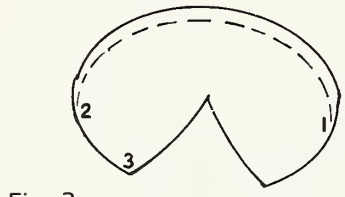


Fig. 2

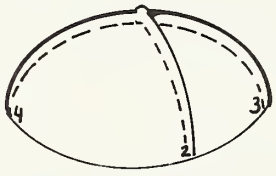


Fig. 3

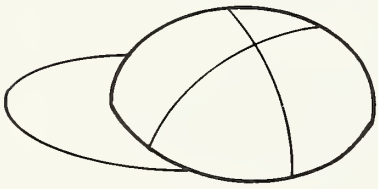


Fig. 4

ALTERNATE INSTRUCTIONS: Paper Tubing Bat

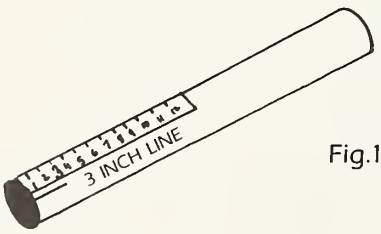


Fig.1

1. At one end of the tubing, line up the 1" end of the ruler with the edge of the tubing and draw a line along the ruler edge of the tubing to the 3" mark. See Figure 1.

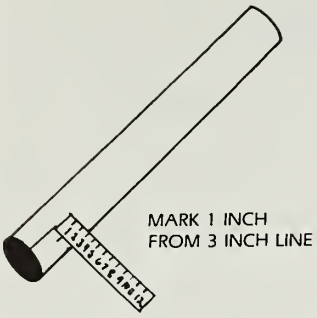


Fig. 2

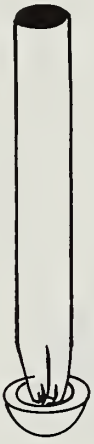
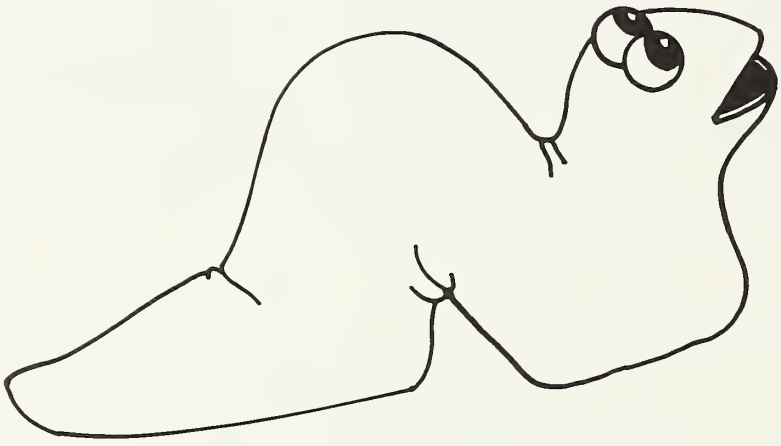


Fig. 3

2. Measure 1" from the drawn line and make a mark. Line the ruler up with the edge and mark as in the first step. Draw another 3" line. Repeat these 2 steps twice more until you have four 3"-long lines running from the bottom edge of the tube. See Figure 2.
3. With scissors, cut on drawn line.
4. Squeeze the cut lines, overlapping each other and wrap with a piece of masking tape the way a real bat is taped.
5. Glue the end of the tubing to the inside of the foam packing piece. Let dry. See Figure 3.
6. Paint the tubing and the packing piece tan or brown, if you like.
7. Decorate with eyes, nose, mouth, hair as described for regular bat in steps 1-2.
8. Prepare the hat as described in steps 3-7 for regular bat.

ROOTIE WORM



ROOTIE WORM

SUPPLIES NEEDED: Pencil

Scissors

Yardstick

Glue

Felt or other heavy fabric - 1/4 yard or 9" x 24". Suggested colors: tan, brown, peach, pinkish.

Felt (a small piece) for the inside of the mouth, approximately 4" square. Suggested colors: red or bright pink.

Fiberfill stuffing

Buttons, beads, or small pompoms for eyes

Straight pins, needle and thread

INSTRUCTIONS:

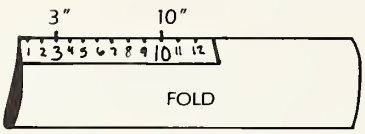


Fig. 1

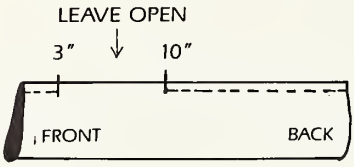


Fig. 2a

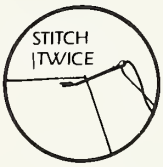


Fig. 2b

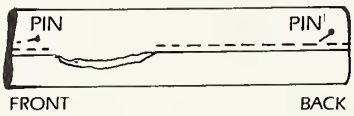


Fig. 3

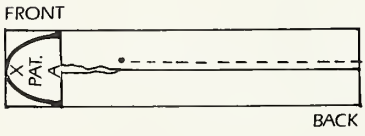


Fig. 4

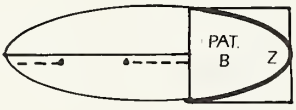


Fig. 5

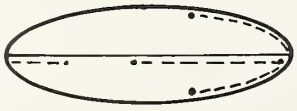


Fig. 6

1. From felt or other fabric cut a rectangle 9" x 24".
2. Fold it in half, lengthwise.
3. Place a ruler along the left unfolded edges of felt. Make sure the short end of the ruler is lined up with the left edge of the material. Draw a pencil mark at 3" and 10". See Figure 1.
4. Pin and hand sew the long edges together about 1/4" from edge, **leaving the space open between the 3" and 10" mark.** See Figure 2a. Knot the thread well when starting and ending. Taking an extra stitch over the top of the first stitch will hold it better. See Figure 2b.
5. After sewing, place "tube" of felt on a flat surface so the stitched edges run down the center of "tube". Pin at each end to hold down flat. See Figure 3.
6. Select pattern A. Line it up so point X touches the edge of "tube" front. The front is the end with the 3" of stitching. Using either a pencil or a small felt tip marker, trace **the curved edge only** onto the felt. Remove the pattern and cut on this line, being sure you don't cut the center line stitching. See Figure 4.
7. Select pattern B. Line it up so point Z touches the end edge of "tube" back. Using a pencil or a felt tip marker trace around **only the curved edges** onto the felt. Remove pattern and cut on this line. **Do not cut through stitching.** See Figure 5.
8. Pin and sew 1/4" in from edges along this curved part. Use a double threaded needle, knotting well at the beginning and at the opposite end of stitching. See Figure 6.
9. Turn Rootie inside out.
10. Using pattern C, trace and cut one mouth pattern from scrap felt.

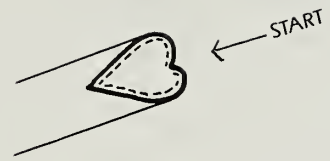


Fig. 7

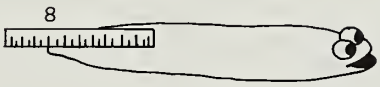


Fig. 8

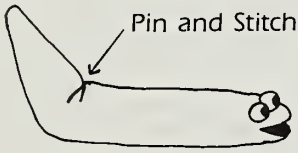


Fig. 9

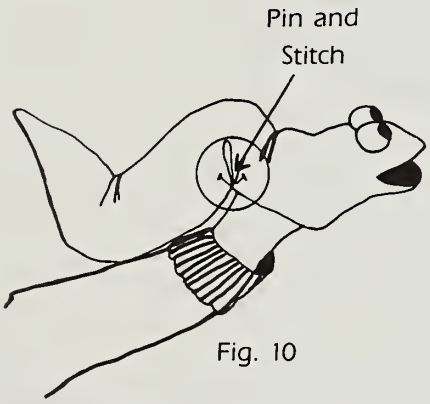


Fig. 10

11. Pin this mouth section to the inside of Rootie's curved front, matching edges. Sew close to edges (about 1/8" in from the edge) with a double threaded needle. Start the knotted end at the inside corner of mouth. Sew all the way around. See Figure 7.
12. Glue or sew eyes in place on top of head. **(The underside of Rootie is where the opening is for your hand.)**
13. Stuff Rootie's tail section lightly, almost to the opening.
14. Place Rootie, belly side down, on a table and measure 8" from the tail section. See Figure 8. Then push the tail up at this 8" point to look like a bent arm. See Figure 9. Pin it where it makes a fold and then take a few stitches on each side to hold it in a bent position. Remove pin.
15. Next, try Rootie on your hand. Push the back part toward your hand so he bends. See Figure 10. Have someone put pins on each side of Rootie's body so it stays in a bent position. Sew in place with a few stitches. Remove pins.
16. Rootie is ready to "talk".

RED SPRUCE: THE TABLE

RED SPRUCE: THE TABLE

SUPPLIES NEEDED: Pencil

Ruler

Scissors

Cardboard tube from toilet paper

2 cardboard or foam grocery trays, or cardboard box lid. Size 7" x 9" to 7" x 11".

Glue

Masking tape

Poster paints - tan, brown, or color to match chair

Small pompoms, buttons, cotton balls, etc., for eyes and nose

Construction paper for features

Thin cardboard sheet

INSTRUCTIONS:

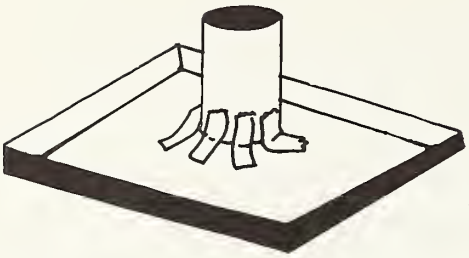


Fig. 1

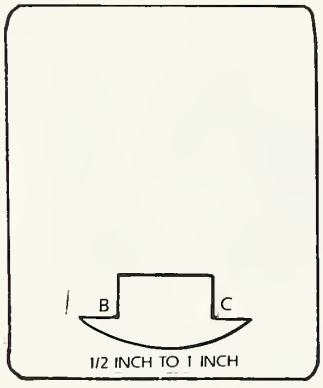


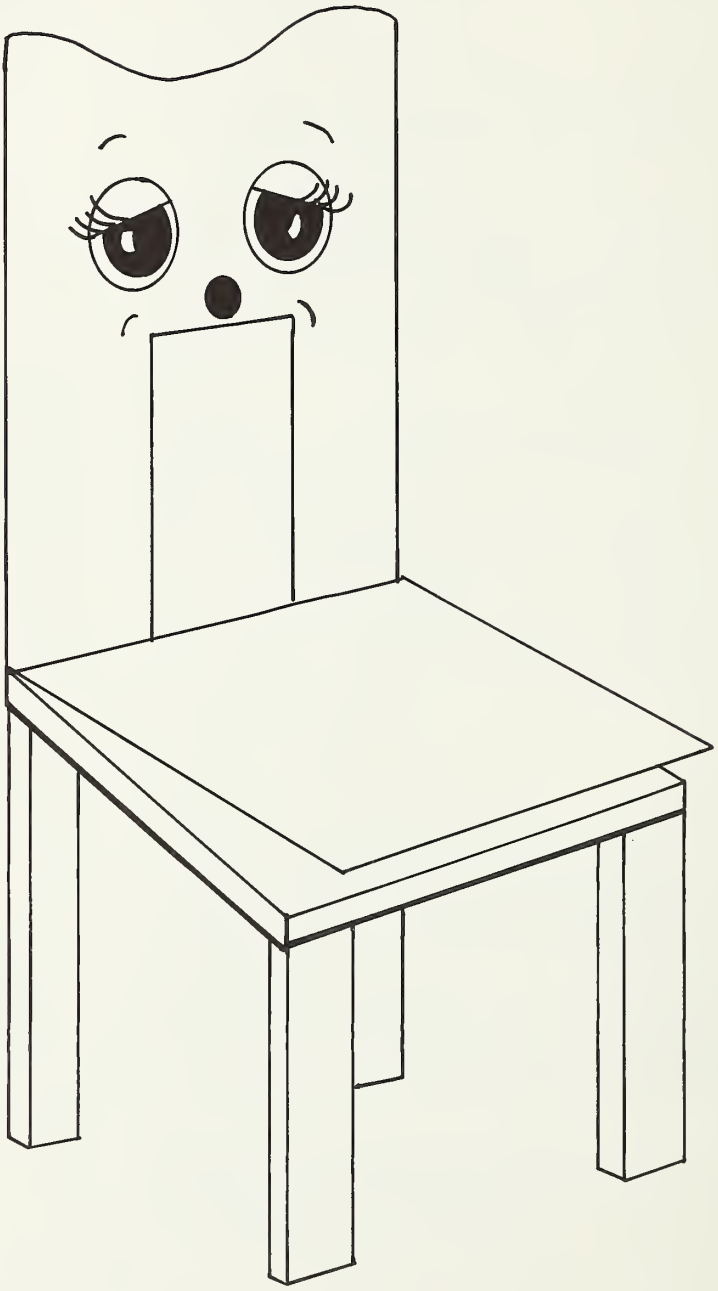
Fig. 2

1. Turn tray or cardboard lid so it is flat on the table.
2. Stand toilet paper roll upright in the center of the tray. Measure with a ruler from each edge to be sure it is in the center.
3. Using 1" to 2" strips, tape roll to base. Overlap pieces of tape all around the roll. See Figure 1.
4. Trace pattern A onto a piece of thin cardboard sheet. Cut out the cardboard. This will become the moving mouth.
5. Paint the table brown, tan, or a color to go with the chair. If painting on foam tray, at least two coats of paint are needed and the paint should be fairly thick.
6. Paint the cardboard mouth on both sides. The tab doesn't need painting.
7. After the paint is dry, lay the mouth piece on top of the tray at the shorter end. It should be equal distance from each edge and close to the bottom, approximately 1/2" to 1". Using a pencil, poke a hole into cardboard or foam at corners B and C. See Figure 2.
8. Remove cardboard piece.
9. Poke scissors all the way through between the two pencil hole marks so there is a slit for the mouth tab. **You may need teacher assistance for this.**
10. Insert mouth tab into slit. On the underside, tape the tab to the foam with masking tape so the mouth won't fall out.
11. Now you can move the tab back and forth to make the table talk.

12. Cut a 3" circle from second grocery tray or a piece of cardboard. Glue this circle to the bottom of the cardboard tube as a base for the table.

13. Turn table upright and add eyes, nose, eyelashes, and eyebrows to complete.

PONDER ROSA PINE: THE CHAIR



PONDER ROSA PINE: THE CHAIR

SUPPLIES NEEDED: Pencil

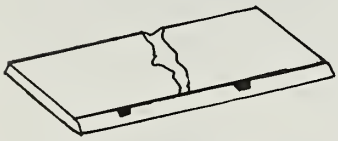


Figure 1

Scissors

3 flat-topped cardboard egg cartons - **tops only.** Egg cartons should look like Figure 1.

Glue

Masking tape

Ruler

Poster paint - tan, brown, or any color to match with the table, Red Spruce

Construction paper - various colors

Pompoms or buttons for eyes, nose

INSTRUCTIONS:

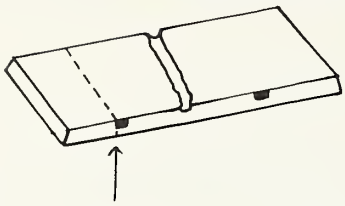


Fig. 2

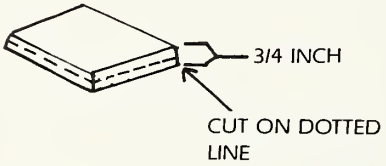


Fig. 3

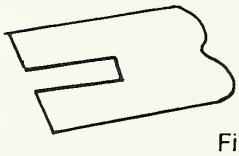


Fig. 4

Fig. 5

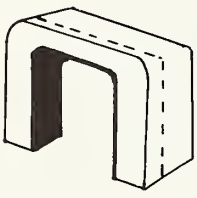


Fig. 6

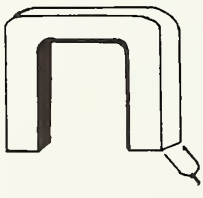


Fig. 7

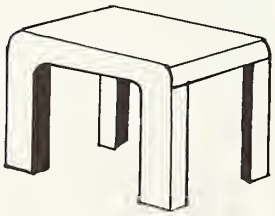


Fig. 8

1. Lay pattern A on one end of the first egg carton top so it lines up with the curved edge. Draw a line next to the straight edge of the pattern and then cut up through the side edges and across the top. See Figure 2.
2. Cut around the overhanging edges. The distance of 3/4" is about half way between top and bottom edges. See Figure 3.
3. From the other half of the first carton top, use pattern B. Trace around the inside cutting line. Cut along these lines. If you want the back part of your chair to be flat cut along the edges of the egg carton. See Figure 4. If you want some overlap to be part of the chair back, then cut it at an angle to include overlap. See Figure 5.
4. Cut pattern C from the second egg carton top. This will be Rosa's flapping mouth.
5. Use the third carton top to cut two of pattern D. These will be the legs. See Figure 6.
6. Trim the overlapping part of the legs pattern to 1/2". See Figure 7.
7. To assemble Rosa, glue the two sets of legs to the bottom of the chair seat (A). Glue the front pair of legs under the seat overlap. The back pair will come to the edge of the seat back, and will be glued underneath. You may have to clamp it or hold it while the glue sets. Let dry completely. See Figure 8.
8. After legs are secure and dried, place piece C on top of seat, lining up the straight edges on either side of the tab. Put a piece of masking tape on each side next to the tab and run the tape down over the seat's back edge and up under the seat. This becomes the flapping mouth. See Figure 9.

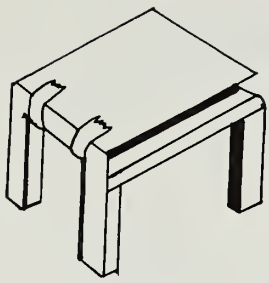


Fig. 9

9. Glue seat back B to the back edge of the chair. Tape it down. See Figure 10.
10. Let the chair dry completely. Paint it. Be sure to paint the inside of the flapping mouth. Keep the upper and lower parts from touching until they are dry.
11. Position eyes and nose on the seat back. See Figure 11.

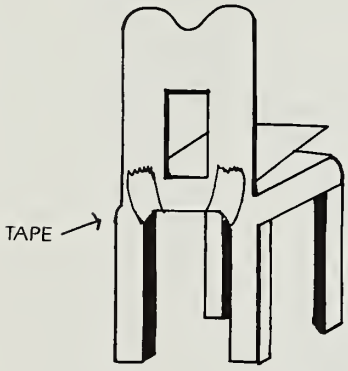


Fig. 10

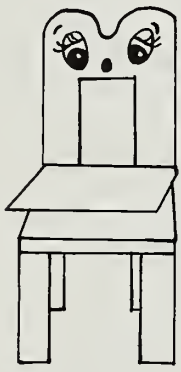


Fig. 11

MS. ACER MAPLE

MS. ACER MAPLE

SUPPLIES NEEDED: Several large grocery bags

Construction paper - green for leaves (unless you want an autumn tree)

Pencils

Scissors

Ruler

Glue

Masking tape

Scotch tape

Crayons or markers

Cardboard tubes from toilet paper - at least 6

Brown cardboard 7" x 12"

Large paper clips

Oaktag

INSTRUCTIONS:

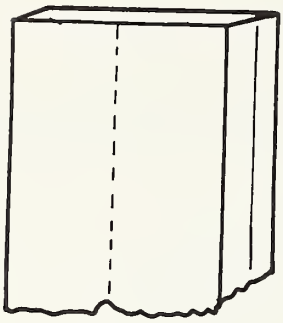


Fig. 1

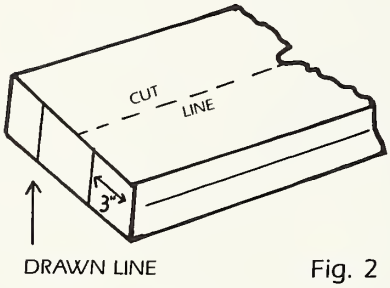


Fig. 2

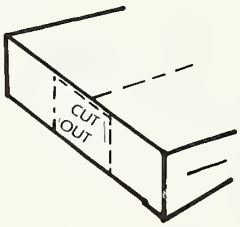


Fig. 3

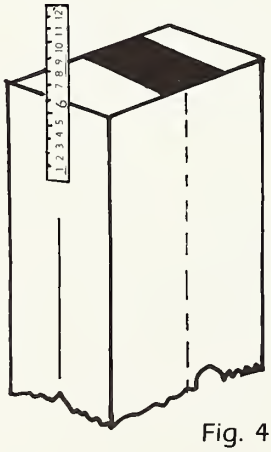


Fig. 4.

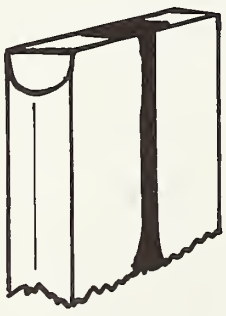


Fig. 5.

1. Cut one of the grocery bags straight up the middle to the fold at the bottom. Don't worry about printing on the bag because it will be turned inside out. See Figure 1.
2. Measure 3" in from each short side of the flat bag bottom and draw a mark. Draw a line from one fold of the bottom to the opposite fold at that 3" mark. See Figure 2.
3. Now cut along the folded edge, down one of the drawn lines, across the front folded edge, up the other drawn line and then across the other fold to meet your beginning cut. See Figure 3.
4. Keeping the bag open, turn it so it is standing up with the cut part at the top. Measure 5" down from the fold at the short side and make a mark. Mark the opposite side the same way. Someone may have to hold the bag upright while you do this. See Figure 4.
5. Now draw a curved line up from that mark to the folded edge on each side, so it looks like the letter U. See Figure 5.
6. Cut this U shape out, along the straight folded edge. Do both sides. It should look like a vest. See Figure 6.
7. You may want to cut out a curved shape on the front for your neck to be more comfortable. See Figure 7.
8. Turn vest inside out so there is no printing showing.
9. If a taller person is going to wear the Tree costume, use another grocery bag and cut up the center like you did the first time. Then completely cut out the flat bottom of the bag so you have one long rectangle.

Fig. 6

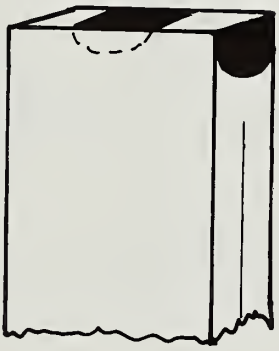


Fig. 7

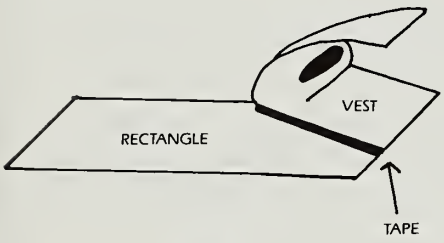


Fig. 8

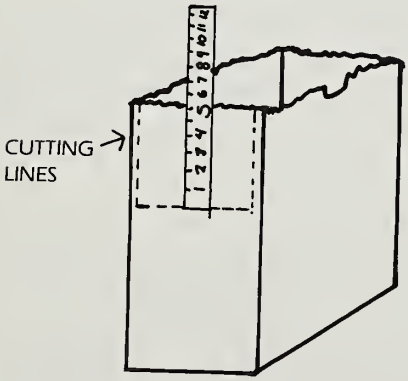


Fig. 9

10. Glue this wide strip along the bottom of the vest. Make sure the printing doesn't show on the outside. The best way to attach the two sections together is to lay the **rectangle** flat on a table or the floor. Squeeze some glue along a section of the rectangle's edge starting at one end. Line up the opening edge of the vest's back. Lay it on top of the glued section, overlapping 1"-2". Use strips of masking tape to help hold the two sections together. Continue glueing and taping until you reach the other edge. Roots may be taped along the bottom inside edge at this point. See Figure 8.

11. Using crayons or markers, you may want to draw the texture of tree bark, little insects or squirrels crawling up the trunk. You could draw the type of bird that pecks for insects in the tree bark. This may be a kind of tree with a cavity where an owl might live. You may want to draw lichens or moss too. Be creative.

12. Take another paper grocery bag (one with writing on only one side) and open it up. Place it upright on a table. With your ruler, measure 5" down from the top edge on each short side. Draw a mark.

13. Cut down along fold of bag, then across at the 5" mark and up the other fold to the top. Cut the other side the same way. See Figure 9.

14. Slip the bag over your head so the writing is at the back of your head. The cut-out edges on the side should be resting on your shoulders. You will need to reinforce the sides of the bag that rest on your shoulders with heavy cardboard. Cut shape to fit the sides including the place for the shoulders.

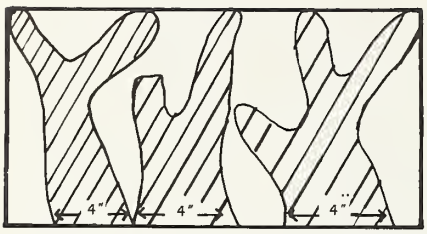


Fig. 10

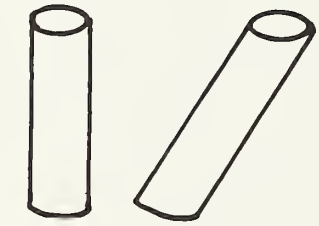


Fig. 11

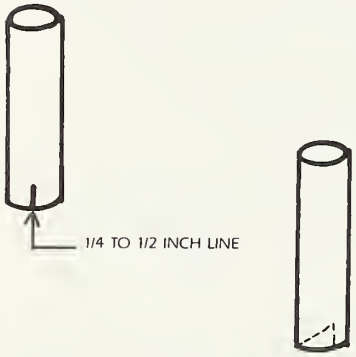


Fig. 12

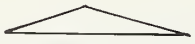


Fig. 13

15. Draw a pencil (or marker) dot on the front outside of the bag where your nose is. You may need some help to center the dot. Slip the bag off your head.
16. Trace and cut out pattern A.
17. Place bag flat on a table so the front with the nose dot is face up.
18. Line up the center dot of pattern A with the nose dot. Trace around the pattern and then cut this circle out, being careful to only cut through the front part of the bag. This is where your face will show through.
19. If you have decorated the rest of the tree trunk, then decorate the front and sides of this head part also.
20. Now you are ready for the 7" x 11" or 12" piece of cardboard. It should be about the same size as the bottom of the bag.
21. You also need the six toilet paper rolls or other paper tubes cut to that size. These will be used for branch bases.
22. Cut up the side of another paper bag. Then cut out the bottom so that you have a long rectangle. Cut off any printed part.
23. On this paper, draw and cut out six branches that are 4" wide at the bottom and about 1" wide near the top. Some branches can curve across the paper. Try to make each branch different from the others. (You may need another grocery bag). See Figure 10.
24. When all the branches are cut out, take the toilet paper rolls. Decide if you want the branches to stand straight up or if you want some to go at an angle. To make a branch at an angle, draw a line 1/4"-1/2" up from one end of the roll. See Figure 11.

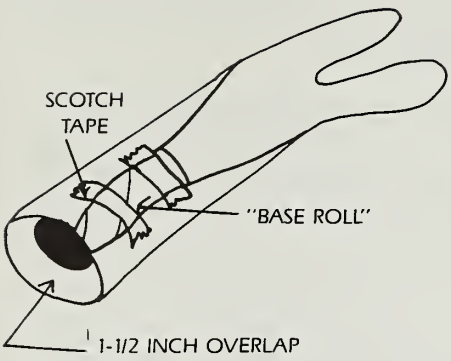


Fig. 14

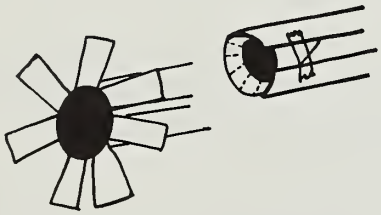


Fig. 15 A & B

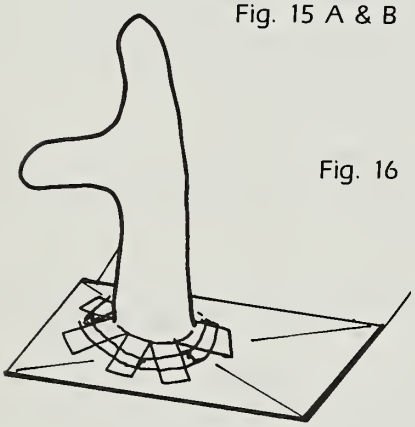


Fig. 16

Fig. 17

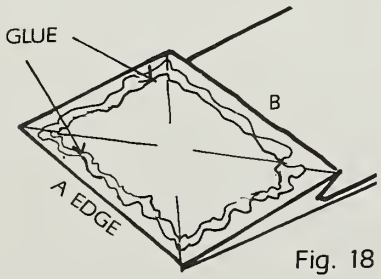


Fig. 18

25. Then start cutting at the bottom edge about 1-1/2" to one side of the line. See Figure 12. Do the same from the other side of the line. The shape you remove will look like Figure 13.

26. Take one of the branches and wrap the wider end around a toilet paper base roll, leaving about 1-1/2" of the paper hanging beyond the edge of the tube. Scotch tape the branch to the base roll at the top and bottom. See Figure 14.

27. Do this to all the branches and base rolls.

28. Cut tabs or slit (between 3/4" and 1" wide) in the overhanging paper at the bottom edge of each branch. Cut to the edge of the tubing. Fold these tabs out so they look like sun rays. See Figure 15 A and B.

29. Have someone help you arrange and attach your tabbed branches to the 7" x 12" cardboard. Put a little glue on each underside of the tab and glue to the cardboard. Reinforce it by taping it down with some scotch tape. **Have the front part of the branches all facing one way so you don't see the back of the rolls.** Glue and tape down all the branches. Let them dry completely. See Figure 16.

30. Take the "head" bag and let it fold naturally. The cut-out circle for the face should be underneath and the printed store name is face up. See Figure 17.

31. Squeeze glue around the edges and in the middle part of the bag bottom.

32. Place the branched cardboard on top of the glued bag bottom, making sure the fronts of all the branches are all facing toward edge A. The open part of the rolls will be toward edge B. See Figure 18.

33. Use large paper clips to clamp down the corners and front and back edges. **Let dry completely.**

34. Meanwhile, trace pattern B onto oaktag. Using the oaktag pattern, trace leaves onto green construction paper. By stacking two or more sheets of paper together you can cut more than one leaf at a time. You will need to cut 30-50 or more leaves. Another option is to press real maple leaves in a book. (Old phone books are great. Allow at least a week or more for that.)

35. Also, you may want to add extra branches by cutting them out of paper grocery bags and glueing or taping them to the base limbs.

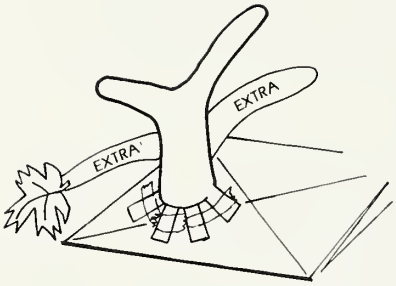


Fig. 19

36. Leaves may be glued to the branches while the cardboard is drying. You may want to glue some of the leaves to the base of the branches to hide the tabs and tape. See Figure 19.

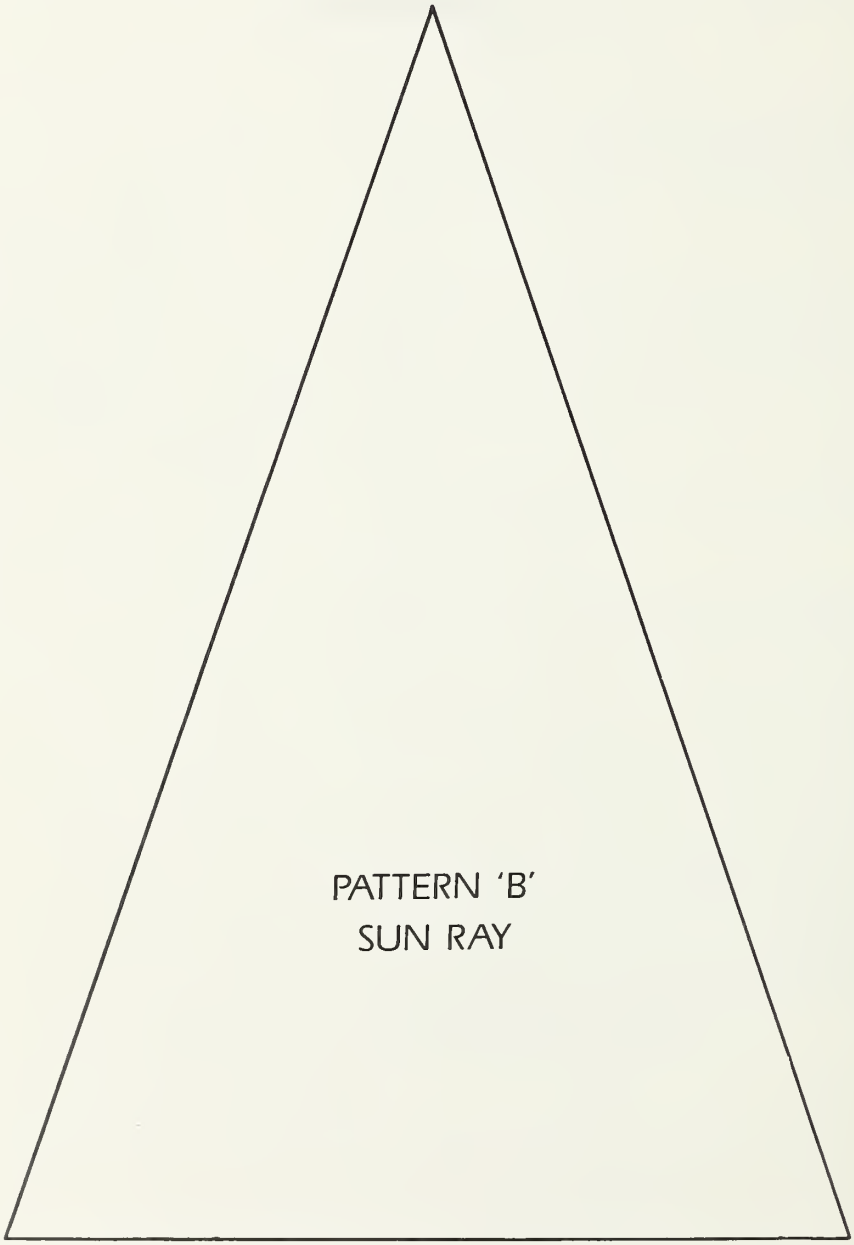
37. Bird's nests may be drawn, colored, cut out, and glued to the branches to add life to the tree.

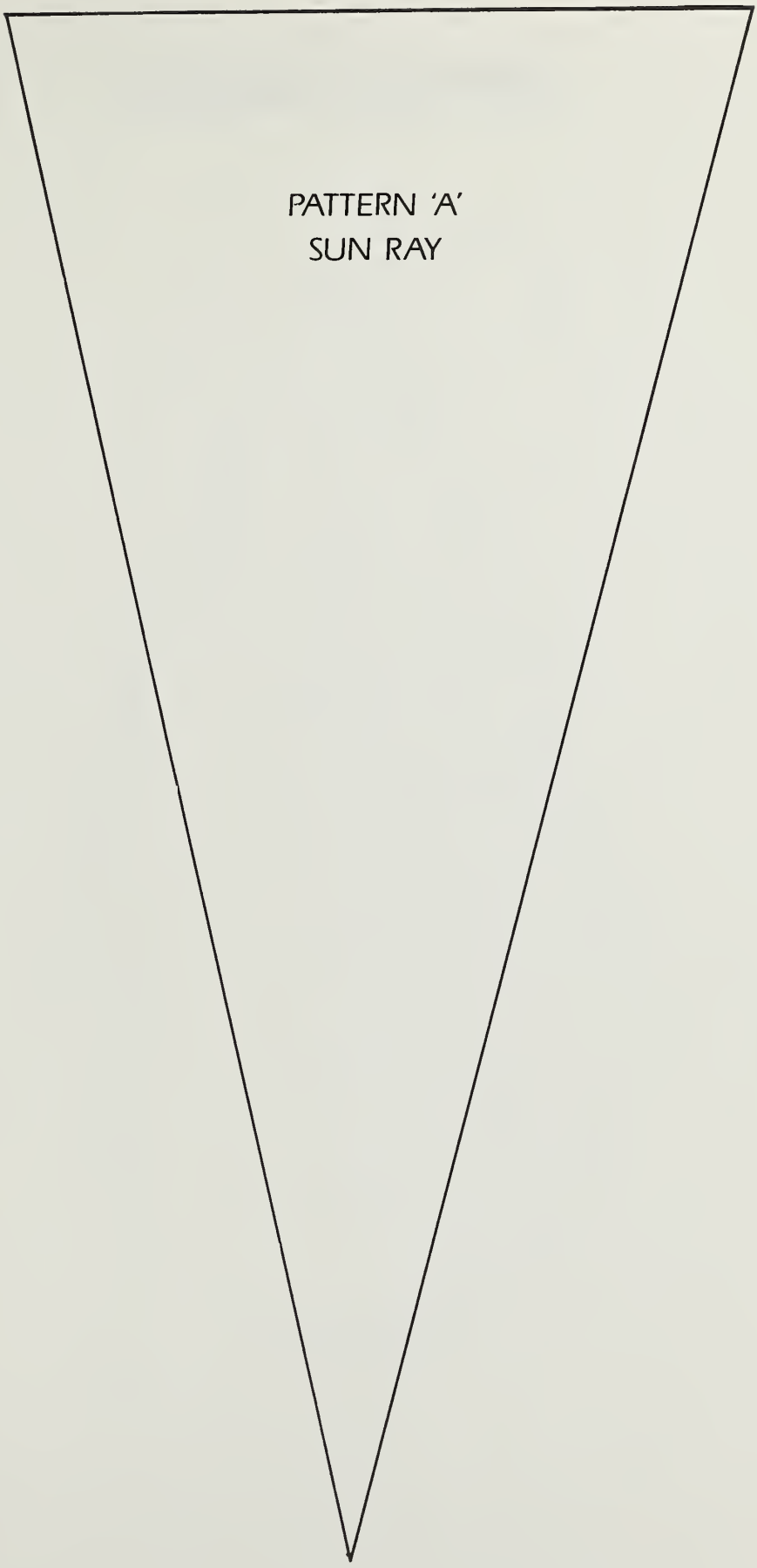
38. Wait overnight before unclamping the bag and cardboard with the branches.

39. Wear a brown, long-sleeve shirt. Slip into the trunk, pull the top over your head with your face showing through. You may want to wear brown mittens and hold leaves in your hands and/or have them pinned to your sleeves since your arms are branches, too. The head part may have to be clipped to the trunk at the shoulders with large paper clips. **You are now Acer Maple!**

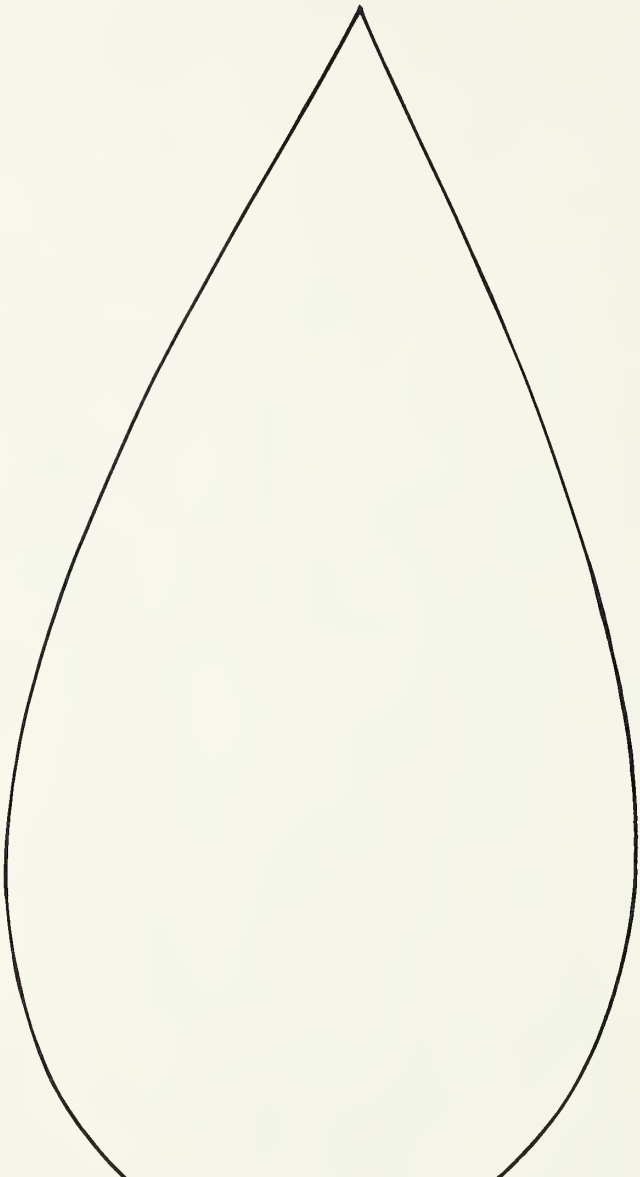
PATTERNS

PATTERNS FOR SUN

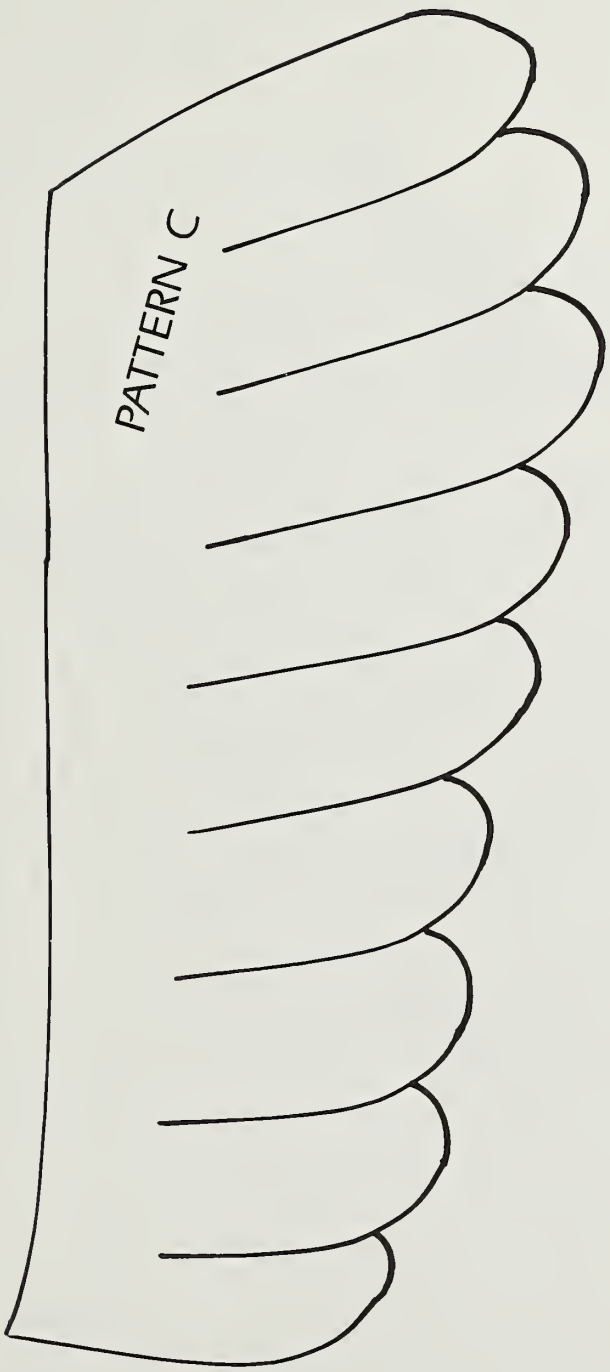


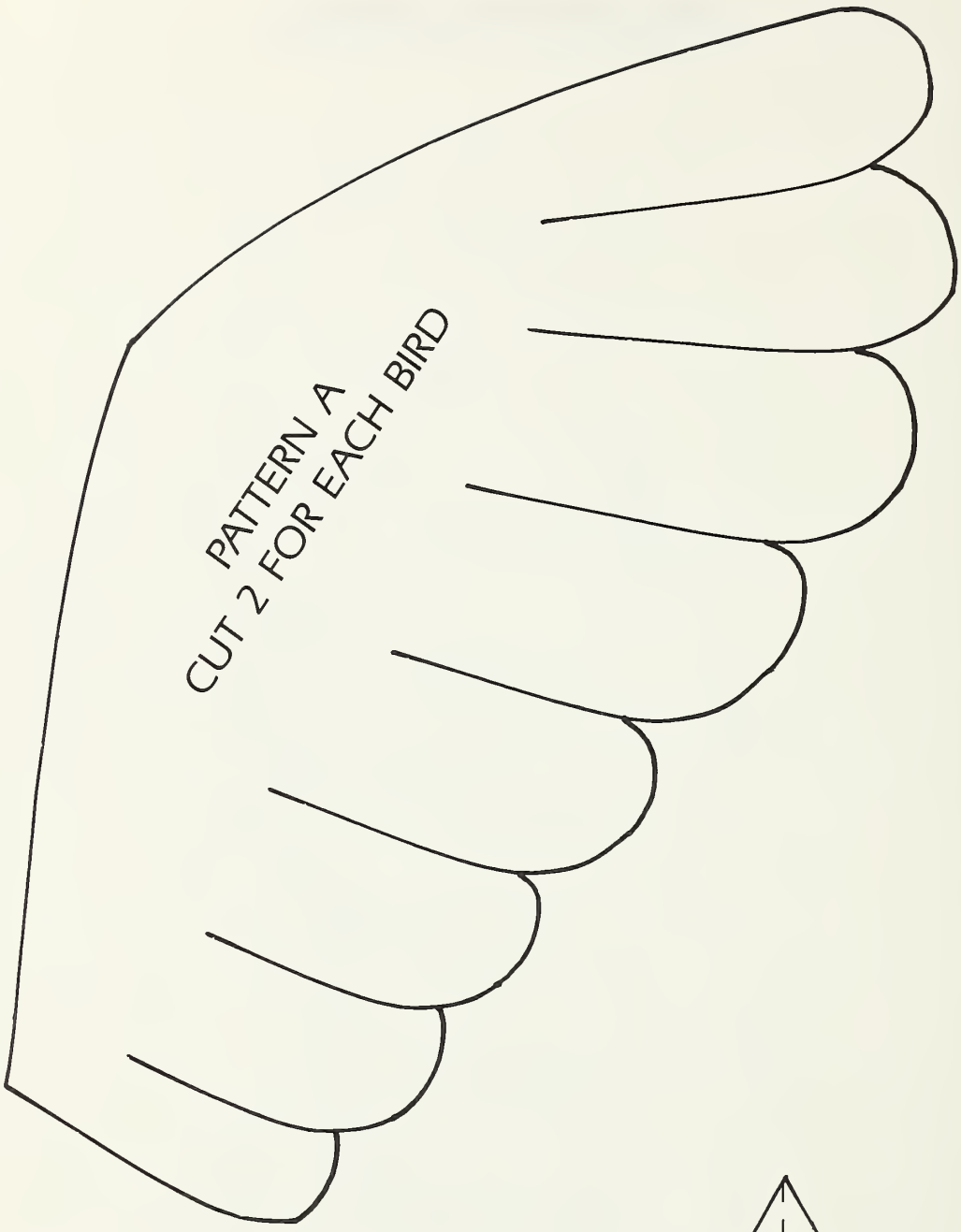

PATTERN 'A'
SUN RAY

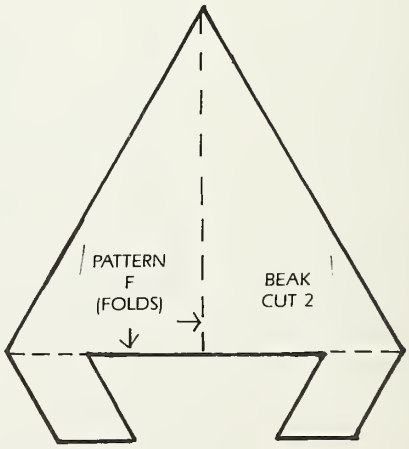
RAINCLOUD RAINDROPS

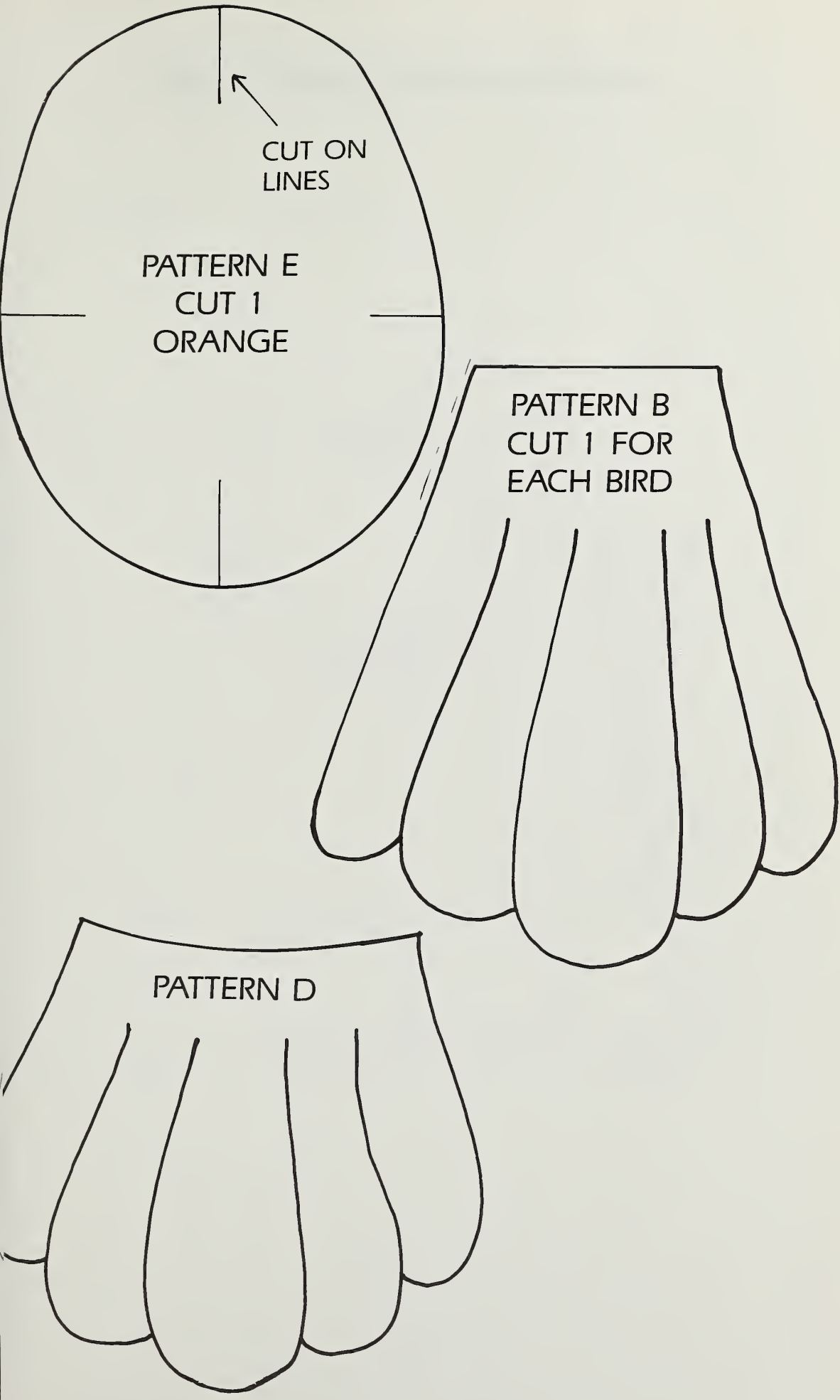


PATTERNS FOR ROBINS

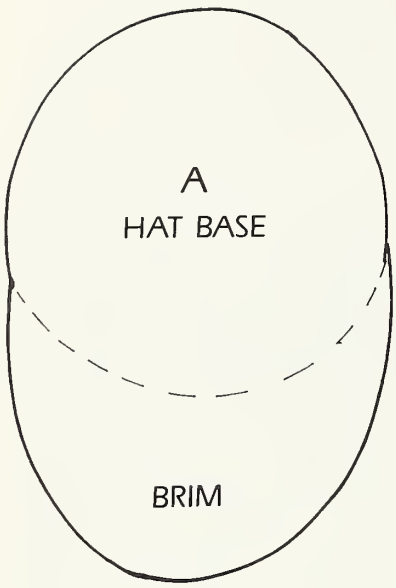


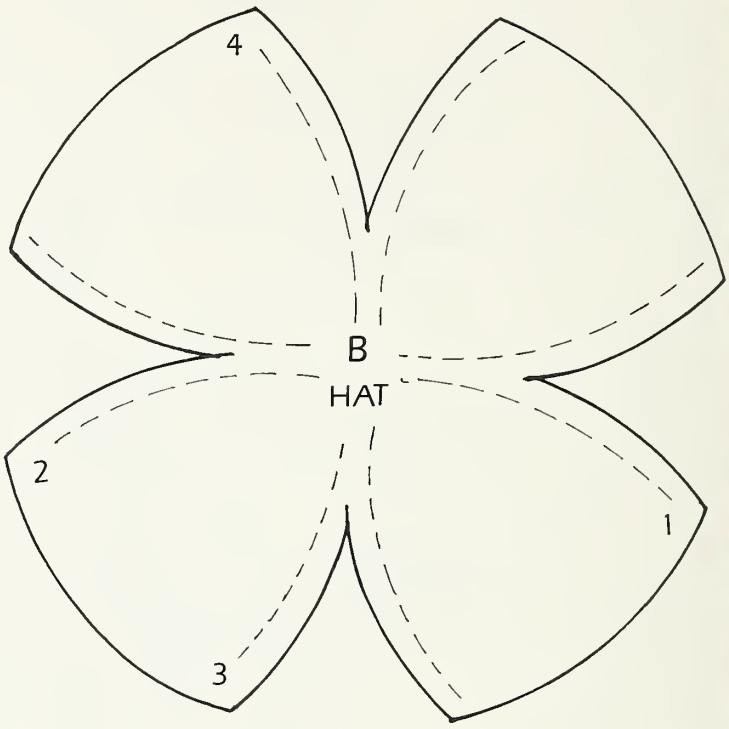

PATTERN A
CUT 2 FOR EACH BIRD

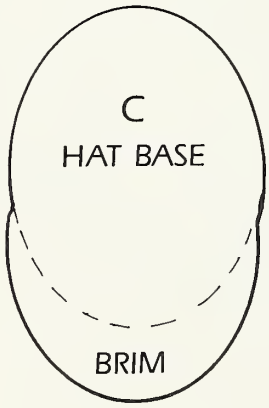

PATTERN
F
(FOLDS)
BEAK
CUT 2

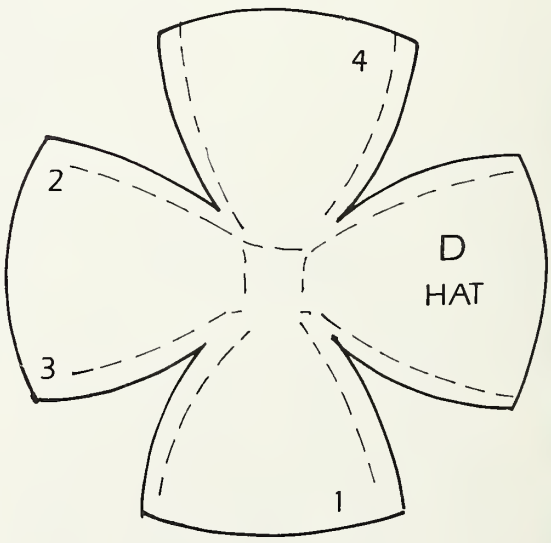

CUT ON
LINES
PATTERN E
CUT 1
ORANGE
PATTERN B
CUT 1 FOR
EACH BIRD
PATTERN D

PATTERNS FOR WHITEY'S HAT

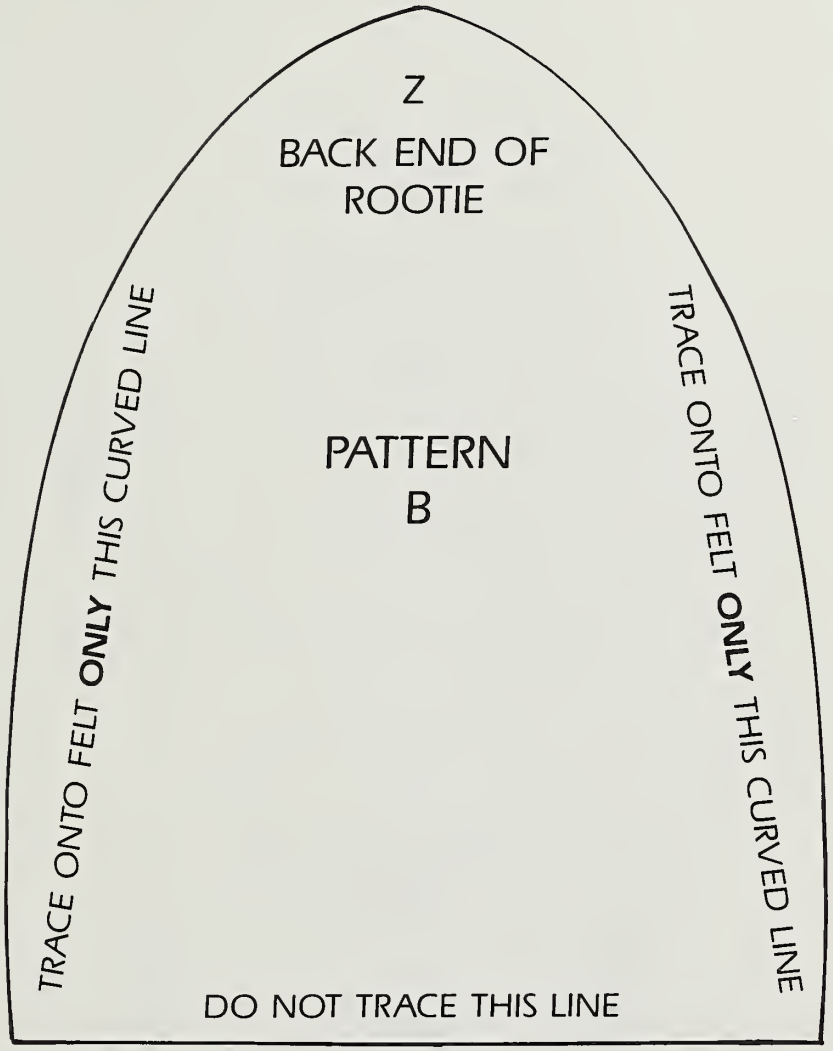


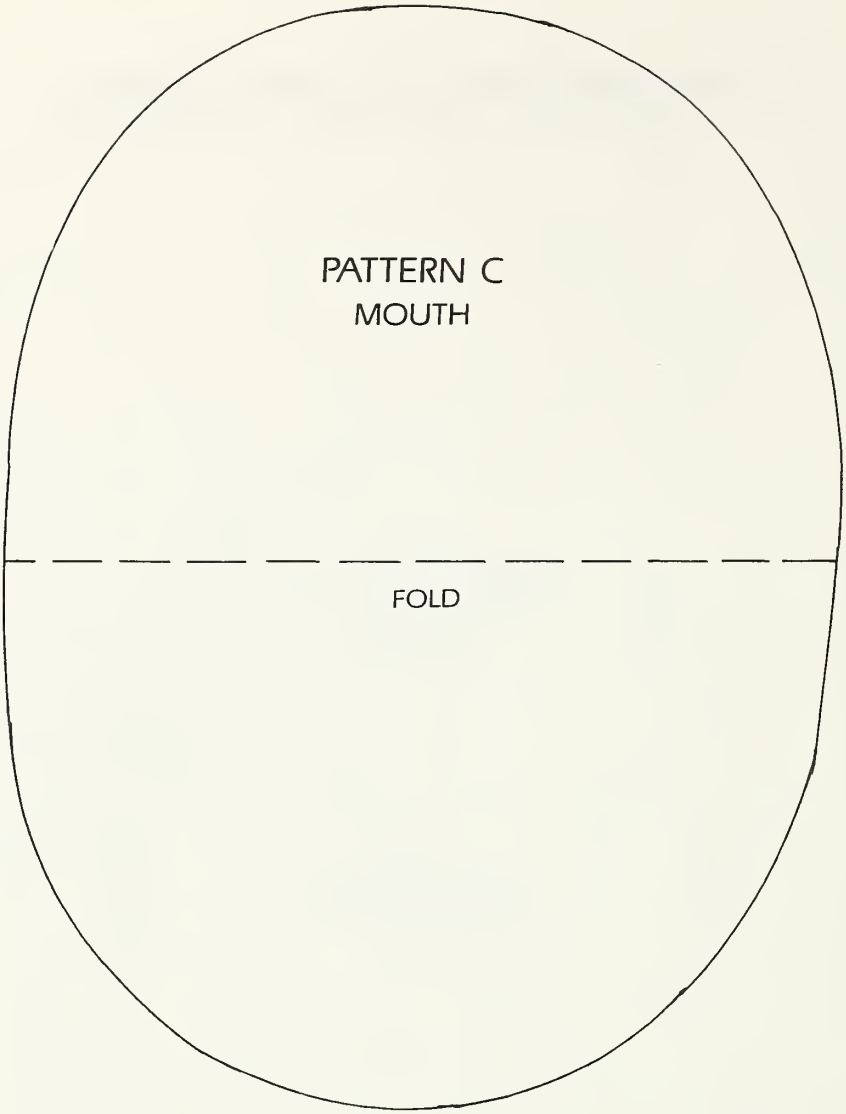


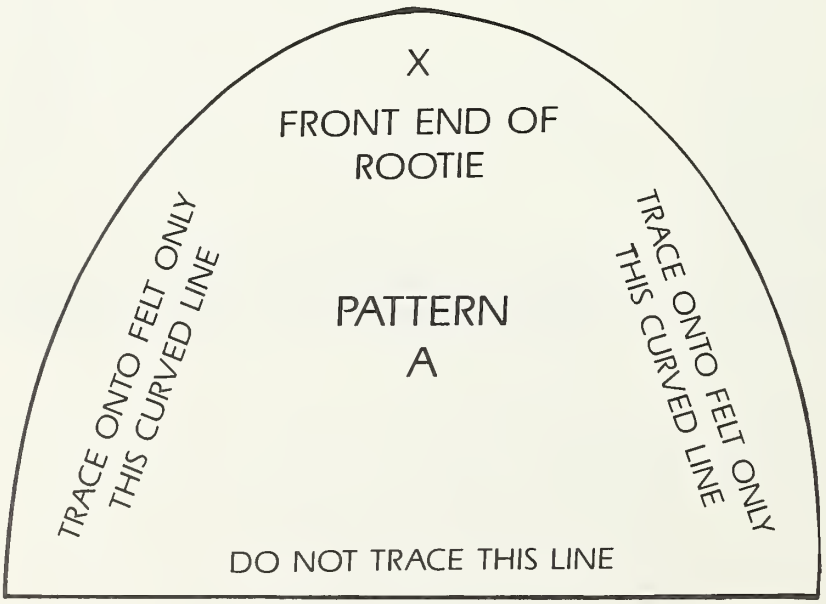




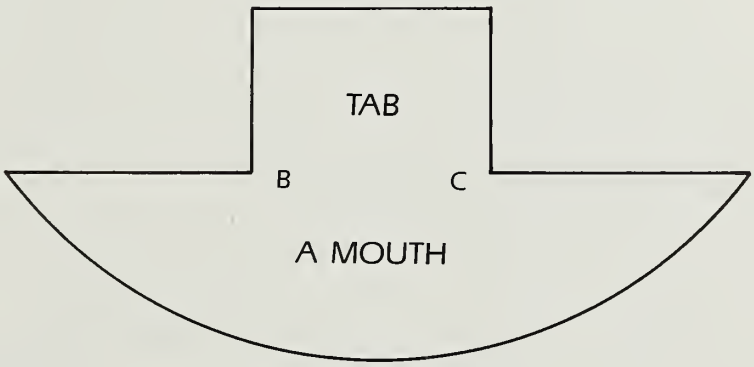
PATTERNS FOR ROOTIE WORM



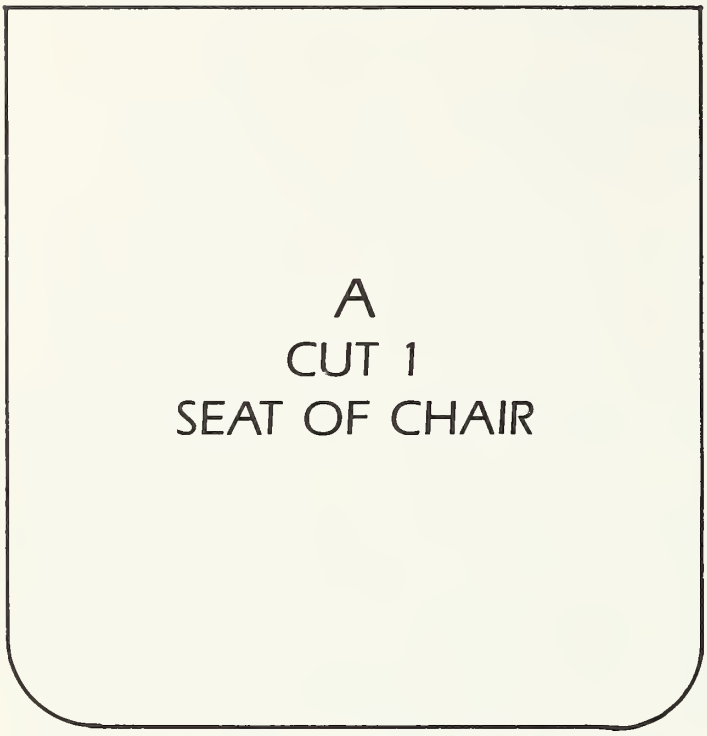

PATTERN C
MOUTH
FOLD

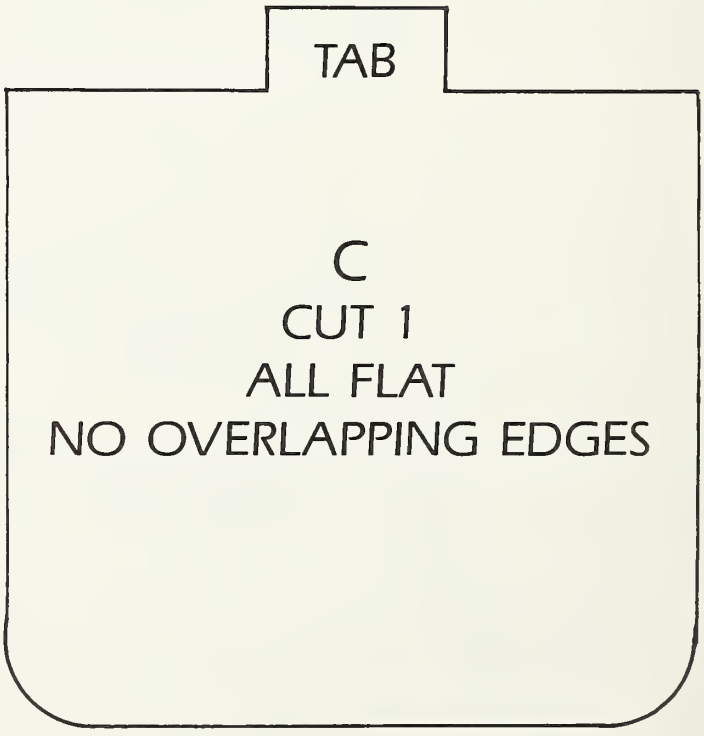

X
FRONT END OF
ROOTIE
TRACE ONTO FELT ONLY
THIS CURVED LINE
PATTERN
A
TRACE ONTO FELT ONLY
THIS CURVED LINE
DO NOT TRACE THIS LINE

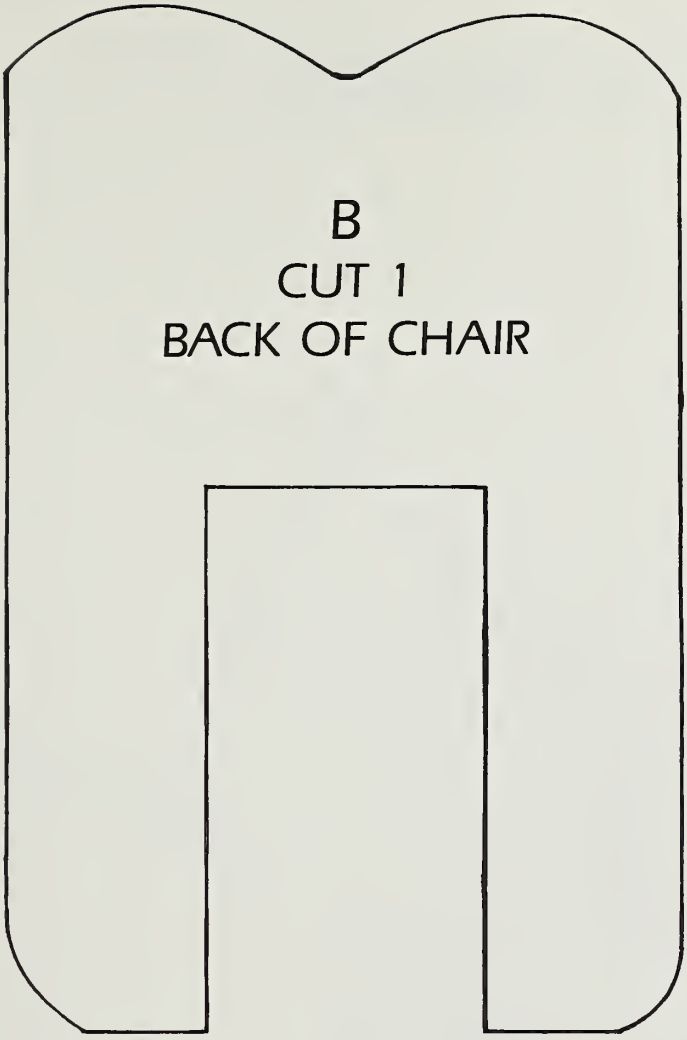
MOUTH PATTERN FOR TABLE

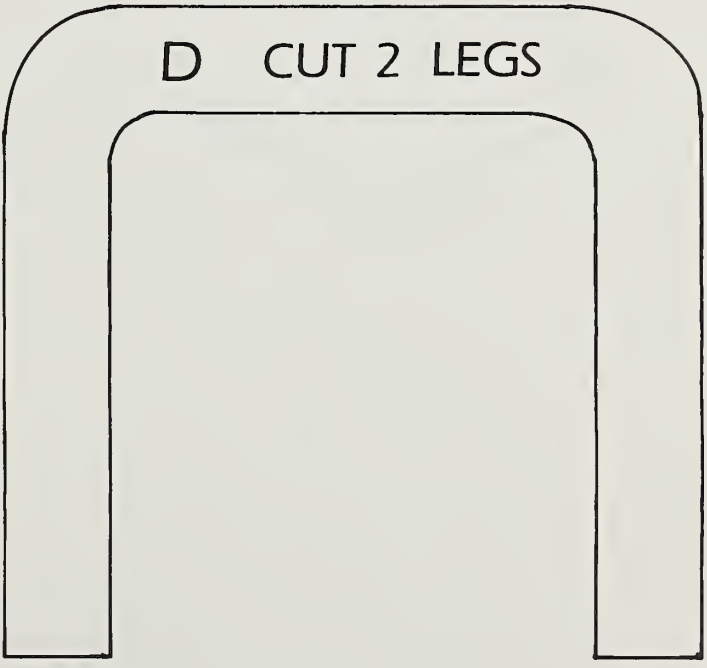


PATTERNS FOR CHAIR





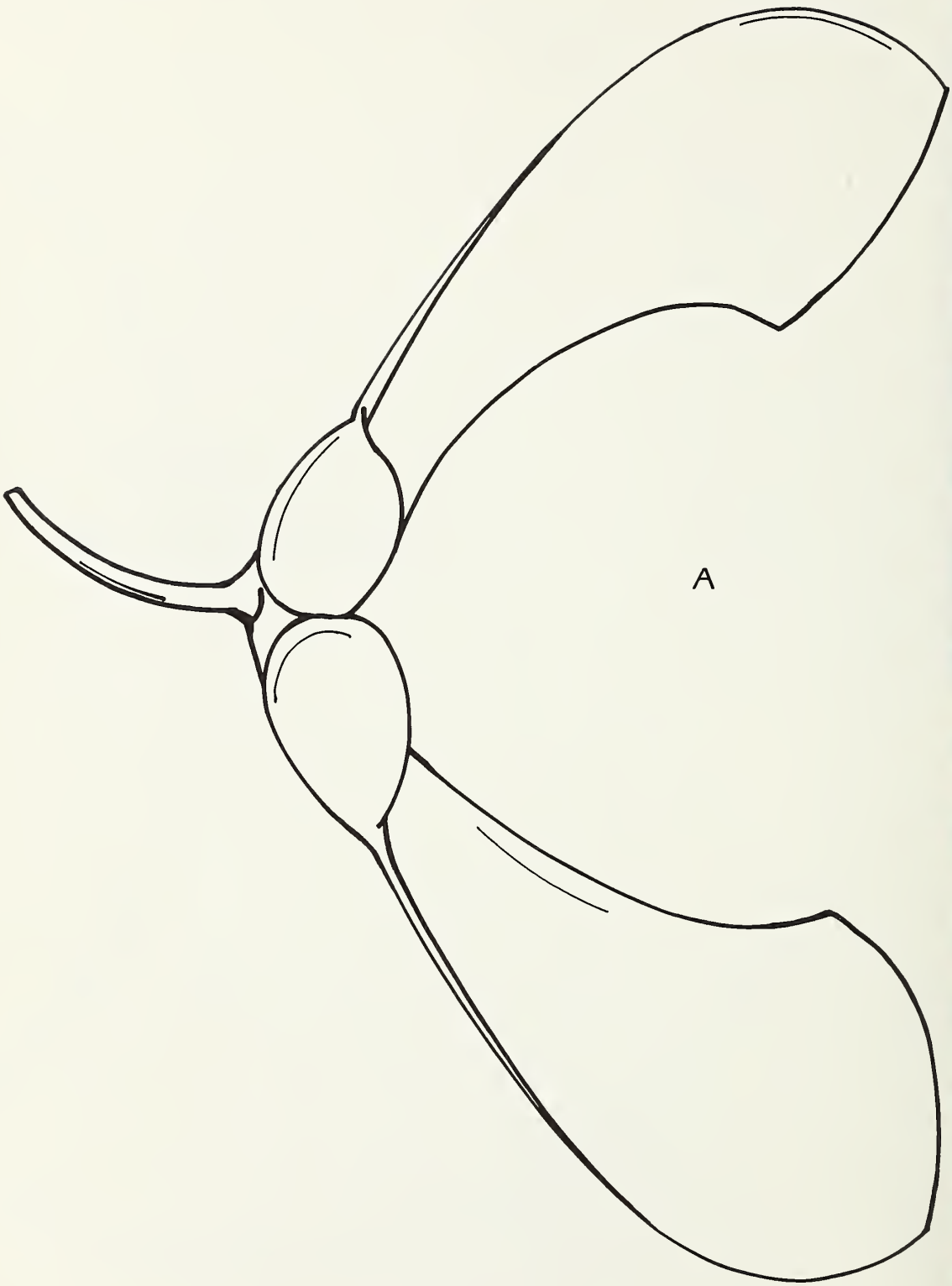

B
CUT 1
BACK OF CHAIR


D CUT 2 LEGS

MS. ACER MAPLE

PATTERN A

MS. ACER MAPLE


A

OTHER PROPS FOR THE PLAY

FOR GRANNY GREENTHUMB:

Materials:

1 piece of heavy paper - 9" x 12"

2 pieces of cardboard - 11" x 14"

Crayons or paint

Glue

Scissors

For Acer's Baby Picture - Trace the pattern for Granny Green thumb onto a 9" x 12" paper. Color or paint it green. You may want to use a field guide to make proper shading. Cut two frames the same size from cardboard. The outside diameter should be about 2" larger than the drawing paper. Cut the inside of one of the cardboard sheets so that the samara (maple seed) can be centered in the frame. Sandwich the picture between the two frames and glue them together. The front of the frame could be decorated like a Victorian picture frame or any way you like.

Granny may need a shawl, or an old sportcoat, ruber garden boots, and perhaps some "granny glasses", too.

FOR THE HOST:

Find an oversize book or make one from cardboard. Make a cover for the book and print on it in very large letters, "THIS IS YOUR LIFE, ACER MAPLE". This will hold the host's script so that he/she can call the guests in proper order. The host may want to wear a jacket and bow tie or some other sort of costume.

DECORATIONS

FOR THE STAGE OR CLASSROOM

The stage or classroom could be decorated with trees cut from butcher or craft paper that comes in large rolls.

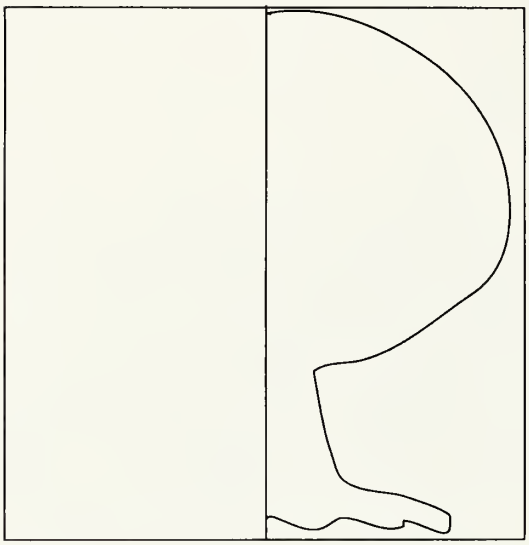


Figure 1

1. Cut the paper the length that you want the trees. They could be short trees only 2 or 3 feet high or they could be as tall as 6 feet.
2. Fold the paper in half lengthwise.
3. Sketch a rough semi-circle or half oval or whatever shape you wish to make for the crown of the tree. Start from the fold at the top for the crown and finish by drawing half of the trunk as shown in Figure 1.
4. Then, sketch in the branches to fill in the shape. See Figure 2.
5. Cut both sides of the tree together so they are bi-semmetrical. Remember cutting out folded snowflakes or paper doll chains? It's the same principle. It is possible to cut and fold as many as four trees at the same time. If you try this, staple the papers together in many places so they don't slip while cutting.
6. These trees are very decorative on their own but they could have leaves or flowers cut and pasted on the branches if the children feel ambitious.

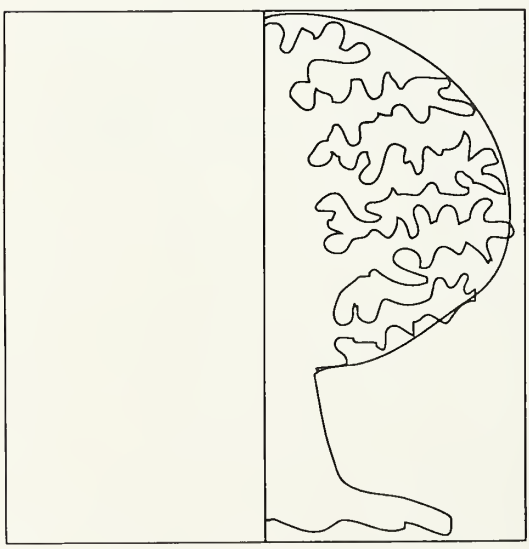


Figure 2

The design for these trees was provided by Trudie Kalinen of Robinson School, Westford, MA.

Project Learning Tree Activities related to Acer Maple Puppet Show

These activities can be used to supplement and broaden the learning program.

FROM THE ELEMENTARY GUIDE

Adopt-a-Tree (This is an excellent activity to focus the entire project.)
The Closer You Look
Living Labels
Plant Personification
Maple Mallets and Ash Bats
Make Your Own Paper
How Big Is Your Tree?
Tree Cookies
Did You Notice?
Musing on Music
City Trees
A Tree From an Acorn Grows
Water You Know
Sunlight and Shades of Green
Trees as Habitats

FROM THE SECONDARY GUIDE

Tree Verse
Shades of Meaning
A Cassette Tour of Neighborhood Trees
Forest Products Around Us

INCREDIBLE TREES

Main Concept: We use a vast variety of forest products which come from all parts of the tree: trunk, flowers, leaves, sap, fruit, bark, and roots.

Suggested Materials:

- nuts
- fruits - apples, pears, peaches
- wood molding
- root beer or birch beer
- aspirin
- dates
- pencils
- chocolate bar with almonds and coconut
- cloves and cinnamon sticks
- witch hazel
- cardboard
- maple syrup
- piece of plywood or particle board
- spruce gum
- paper towels
- coconuts
- firewood
- tea
- bay leaves
- paper - newspaper, computer paper, cards

There are many other materials you could use: natural rubber, a paper wasps nest, a woven wood basket. Add a few trick materials - plastics that look like wood, or a piece of counter top, tiles, some new plastic building toy logs, or an animal horn handle, etc.

Activity 1: Make three separate piles of materials. Divide the class into three groups and have each group separate its pile into categories such as parts of trees from which each product comes (i.e., trunk, bark, leaves, fruit, sap, flowers). They can mark their products in the appropriate blocks on the worksheet. See if they can catch the tricks. Discuss findings. See if they can come up with other products.

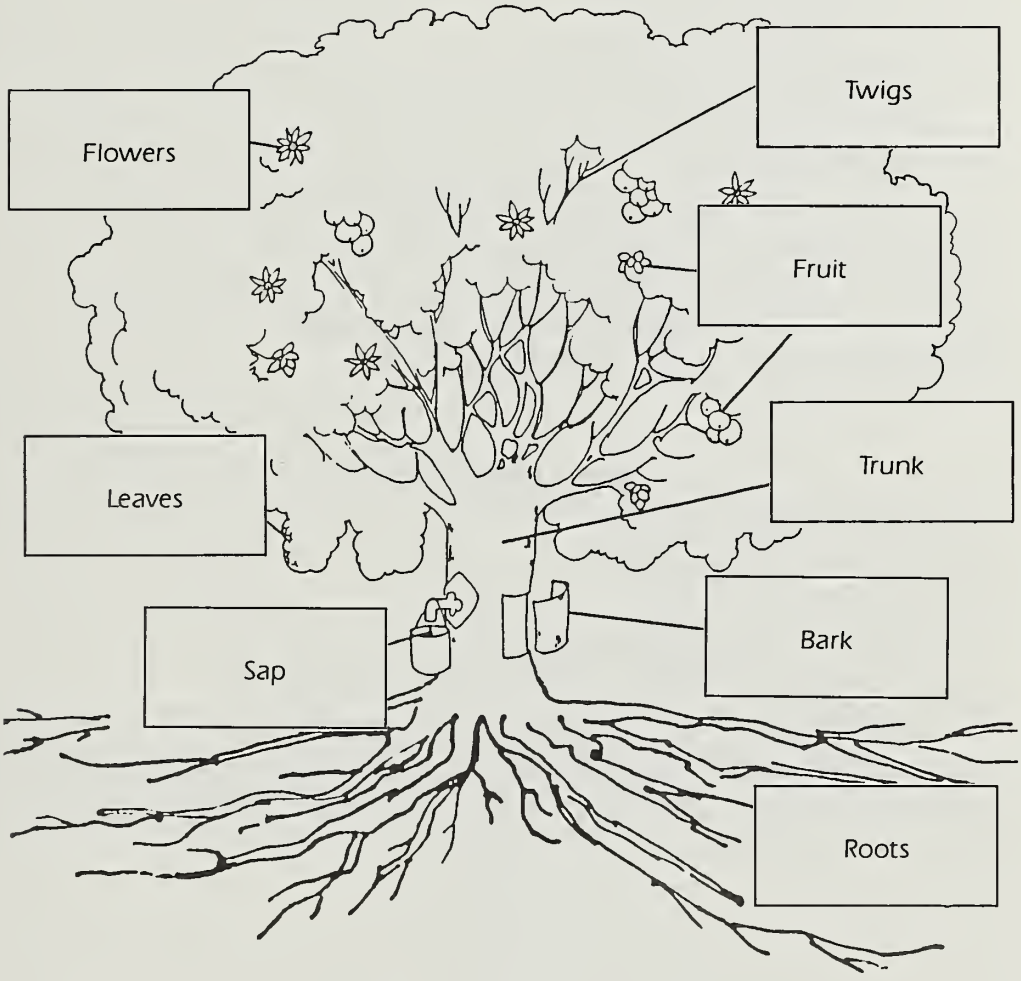
Activity 2: Make a grouping of some of the materials again, as many as 10 or 15 items. Mix them up from the different groups. Cover them with a sheet or towel. Gather a group of children around and give them a short time, like 30 seconds or 1 minute to memorize what is in the pile. Cover it up. You could have the children write their list on a piece of paper or you could have them each call out one item they remember. Uncover it to see if they remember all of the items.

Adapted from: Teacher's Guide for Arbor Day and Forest Conservation Week. New Hampshire Forestry Communications Council, 1987

INCREDIBLE TREES

WORKSHEET

From what parts of the tree did the displayed wood products come?



TREE TREATS

REFRESHMENTS FOR THE DAY OF THE PLAY

Major ingredients in these Tree Treats come from trees, including the spices. The * next to the ingredient means it comes from a tree.

APRICOT SQUARES

1 8 oz. package dried apricots*
3/4 cup shredded coconut*
1 teaspoon grated orange peel*
1/2 cup powdered sugar
1 tablespoon orange juice*
1/2 teaspoon vanilla*?

Finely chop apricots and coconut in a blender, food chopper, or processor. Blend the sugar, orange juice, and vanilla in a small saucepan. Heat until just beginning to boil; stir well and pour into apricots and coconut. Blend well and press into an 8" square pan. Refrigerate to harden and then cut into squares.

TRIPLE TREE TREATS

8 oz. pitted chopped dates*
6 oz. pitted prunes, chopped*
1 cup walnuts or pecans*
1 cup Total or other flaked cereal
1/3 cup wheat or oat bran
1/3 cup honey

Chop and mix all the ingredients together. Roll heaping teaspoons into balls and refrigerate. Optional - roll in coconut and then refrigerate for quadruple tree treats.

APPLE, DATE AND NUT COOKIES

1 cup butter or margarine
1 cup sugar
1 cup dark molasses
3 eggs
1 cup dates*
1 cup chocolate chips*
1 cup walnuts or pecans*
2 tablespoons flour
3 cups flour
1 teaspoon baking powder
1 teaspoon baking soda
2 teaspoons cinnamon*
1 1/2 teaspoons cloves*
1 teaspoon nutmeg*
1 cup applesauce*/

Cream butter. Add sugar and molasses. Add eggs, one at a time and 2 tablespoons flour. Mix well.
Sift 3 cups of flour, baking powder, soda, and spices. Add applesauce alternately with flour mixture to the butter and sugar mixture, mixing thoroughly after each addition. Stir in dates and nuts and chips.
Drop by teaspoons onto greased cookie sheet. Bake at 375 degrees F, about 12 minutes. Makes about 6 dozen.

CREAM CHEESE SPREAD

8 oz. cream cheese
1 teaspoon grated orange peel*
1/2 cup chopped toasted almonds*

Soften cream cheese. Blend in nuts and orange peel. Spread on apple slices.

BEVERAGES AND OTHER TREATS

Serve chilled apple cider*, apple juice*, orange juice*, or lemonade*.
Fresh fruits might be offered: apple slices with cream cheese spread or apple butter, cherries, pears, plums, orange slices - any fruit in season, as long as it grows on trees.

HOW TO PLANT A TREE

Choose the Right Tree for the Right Place

1. Have a local nursery help you choose a healthy tree that is hardy in your area. Is it resistant to diseases and insects?
2. If you are given a tree, learn what kind of tree it is and what its growth habits are. Does it grow best in a wet site or a dry site? Does it require a lot of sun or does it require the shade of other trees as protection?
3. Choose the right tree for the right place. Ask the sales person at the nursery how tall the tree will grow when it is mature. If you have a site selected first, describe it to the salesperson so they can help you choose a tree that will grow to the proper size for that site . . .
4. Do not accept a tree with pruning cuts flush to the trunk, torn branches, or wounds on the bark. If the trunk is wrapped with tree wrap, have them remove it so you can check the trunk.

Selecting the Site

1. **Never plant a tree under a utility line.** Don't choose a site over underground wires, sewer, or water lines.
2. Avoid sites close to building foundations, a sidewalk, or a driveway. Don't plant too close to the playground.
3. If it is a sun-loving tree, it should be growing in the open. If it is shade-loving, choose a sheltered, shady place.

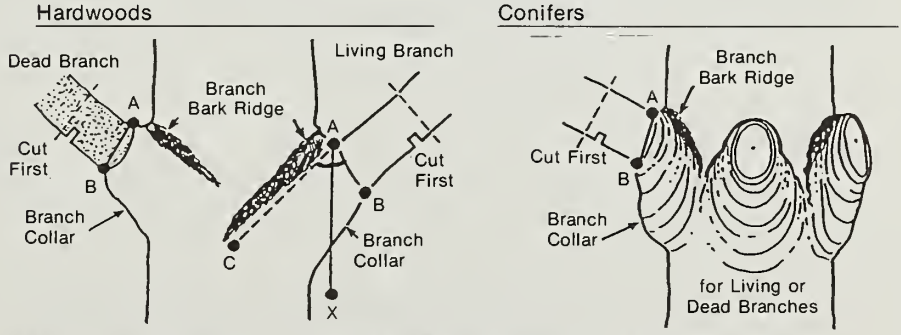
Plant Properly

1. Prepare the site. Dig a hole two or three times the size of the root ball. Loosen the soil and break it up.
2. If the soil is poor, you may want to add some top soil or organic material but mix it with the existing soil. Don't replace the natural soil with new soil.
3. Plant the tree only to the depth it grew in the nursery. If the roots are wrapped, cut the string and open the wrapping. It might be wrapped in plastic burlap that will not biodegrade. Even natural burlap degrades very slowly in some soils.
4. Do not fertilize until the tree is established. This is usually after the first year.
5. Do not wrap the trunk.

6. Pack the soil firmly around the roots.
7. You may want to support the tree with stakes for a while if it is small. Drive two stakes on either side of the tree. Tie the tree firmly but not so tightly that it can not move. Don't use rope or wire through hose to hold the tree. Use a wide woven strapping. Remove this as soon as possible after the tree is established.
8. Keep the tree watered thoroughly but do not over-water.
9. Remove dead or broken branches. Make proper pruning cuts. (See below.)
10. Establish a 12" - 18" circle around the base of the tree, free of grass and plant material. You may want to put a light layer of mulch in the apron to keep the weeds out. This will help protect the tree from injury by lawn mowers and string trimmers.

Proper Care

1. Hug trees gently. Protect the trunk and branches from injury. Don't pull on branches or carve initials in bark. The bark protects the tree from infections and injuries.
2. Water adequately - don't let it become too dry but don't drown it.
3. Be careful of tree roots. They are found mostly in the top 18" of soil and can spread far beyond the crown of the tree.
4. Visit your tree and talk to it but remember that a few big truck tires or lots of little feet can compact soil and squeeze out the air so important for tree roots.
5. When pruning a branch, do not cut it off flush to the trunk nor leave a stub you could hang your hat on. Look for the branch bark ridge or the branch collar. Always cut outside of the collar. Don't paint the cut. (See diagram.)



MAKE PRUNNING CUTS BETWEEN POINT A AND POINT B

THIS IS YOUR LIFE, ACER MAPLE

A Play in One Act

SETTING:

The play is set in an imaginary or a real park in your town. A TV special is being filmed in your park. This show will celebrate the life of a favorite maple tree that has been living in the park for a long time. As the story is told, we are introduced to many who are important to the tree. You should add place names where appropriate for your town or city. Feel free to make adjustments that will personalize the script for your audience. You may wish to add characters or change the names of some, eg. Mr. and Mrs. Robin may become your state birds. Add squirrels, chipmunks, the fog, or even some appropriate humans. You may have some particular character who is special to your location. In fact, if maples are not native or common in your area there is no reason you could not select a tree that is common, eg. Quercus Oak. Add new characters and adjust the script to fit them. Also, all the characters can be played by either boys or girls. This may require changing the script and/or the names of the characters, for example, Granny Green thumb could become Grandpa Green thumb. Let the children use their creativity to personalize the presentation.

CAST:

ANNOUNCER

SHOW HOST:
Mr. Parks Barker or Ms. Sherry Blossom

GUEST OF HONOR:
Acer Maple - a tree growing in your park for 70 years

FRIENDS AND RELATIVES:

Granny Greenthumb - who planted the seed and cared for young Acer as a seedling

The Sun - who gave Acer "Sun energy" to grow

Raincloud - whose water helped Acer grow tall

Mr. and Mrs. Robin - who have raised their families in her branches

Rootie Worm - who lives in and helps to aerate the soil so important to Acer's roots

Ponder Rosa Pine - distant cousin and former neighbor (now a chair)

Red Spruce - distant cousin and former neighbor (now a table)

Whitey Ash - cousin and old friend, and now a famous major league baseball bat

MESSAGES:

1. Trees contribute to the beauty of our parks and cities, cool the summer heat, and improve the quality of our environment.
2. They start very small and grow taller than any other living thing.
3. Trees take a long time to grow, but they live longer than any other living thing.
4. Sun, soil, and water are necessary for trees to live.
5. Trees make their own food.
6. Trees are home to wildlife.
7. Many things we use at home and at play are made from trees.
8. Trees are important to us, so let's plant more trees and take good care of them by learning how they grow.

STAGING:

The set can be as simple or as elaborate as you wish. You may want to create giant trees from paper to decorate the set. This would give the feeling of a park. You could cut out and pin leaves to the curtain or tape them to the wall.

Entrances and exits are often a problem. How you address this will depend on the space and setting. You may want the players to make entrances, or they could stand way in the background and step forward as they are introduced. As the characters complete their lines they can stand in a semi-circle behind the tree or sit on chairs set on the stage. Or the characters could move off-stage, then return for the finale. The play is so short, though, that it seems unnecessary to create elaborate stage action. Keep it simple.

If staging in an auditorium, you may wish to begin with the curtains closed and have the tree behind the curtain. (Remember Acer is growing in the soil so she cannot make an entrance). In a classroom setting, it will not be necessary to attempt to hide the tree. After all, trees can't move in real life, so it is logical that the players have to come to the tree.

The announcer introduces the show and the host. This could be done off-stage or "on-camera" like Ed McMahon and Johnny Carson. The host comes out and welcomes the audience. In a classroom, the announcer can enter either stage right or left with the host entering opposite. Keep stage directions very simple. The more informal it is, the fewer mistakes will be made. This should be a win-win opportunity for the kids. Even the script is flexible. As long as the message is carried, the exact words don't matter. The players just need to maintain their respect for their characters. Let them "ham it up".

ONE LAST THOUGHT: You may want to copy the script, cut it up, and glue it onto large index cards for each of the characters. This would make rehearsals easier and then could be used for the play itself if desired. The Host should have a copy of the full script in the "This is Your Life" book, since he/she is responsible for carrying the action.

SCRIPT:

ANNOUNCER: (off-stage or on-stage - curtain closed)

HELLO, LADIES AND GENTLEMEN. IT'S TIME FOR "THIS IS YOUR LIFE"! THIS IS A PROGRAM DEVOTED TO THOSE IN OUR ENVIRONMENT WHO ARE DEDICATED TO MAKING THE EARTH A BEAUTIFUL, SAFE, AND HEALTHY PLACE TO LIVE. TO TELL US ABOUT OUR GUEST TODAY AND HER WONDERFUL STORY, I BRING YOU OUR HOST, MR. PARKS BARKER/MS. SHERRY BLOSSOMS (Announcer stands back with hand outstretched in greeting and then claps to cue the audience to clap. Then steps out of view.)

(Host enters and bows to the applauding audience.)

PARKS BARKER/SHERRY BLOSSOMS, HOST:

WELCOME, FOLKS, TO TODAY'S EDITION OF "THIS IS YOUR LIFE" . . . A PROGRAM THAT FEATURES SOMEONE SPECIAL WHOSE LIFE HAS BEEN AN INSPIRATION TO ALL OF US. LET ME INTRODUCE YOU TO A TREE THAT HAS BEEN LIVING IN OUR PARK FOR NEARLY 70 YEARS. SHE HAS QUIETLY GROWN HERE, SHADING PICNICKERS FROM THE HEAT OF THE DAY, CATCHING COOL BREEZES, KEEPING OUR AIR FRESH AND CLEAN, AND CONTRIBUTING TO THE BEAUTY HERE YEAR AFTER YEAR. TODAY, WE HONOR HER LIFE OF UNSTINTING SERVICE TO HER COMMUNITY BY BRINGING HER STORY TO YOU. **THIS IS YOUR LIFE, MS. ACER MAPLE!!!**

(Here the curtain opens revealing Acer Maple who waves her leaves to the audience. The host steps back and applauds her, encouraging the audience to do so also. Acer looks around at the audience then focuses on the host)

ACER:

THANK YOU VERY MUCH, MR. BARKER. WHAT A SURPRISE!! I'M EMBARRASSED BY ALL THE ATTENTION . . . I DIDN'T THINK ANYONE WOULD NOTICE. I WAS JUST DOING MY JOB. (Waves branches in front of her face a little.)

(Host shows her and the audience the book titled "This Is Your Life" and opens it.)

HOST:

WELL, LET'S GET STARTED WITH YOUR WONDERFUL STORY. ALL GOOD STORIES BEGIN AT THE BEGINNING AND SO DOES OURS. WAY, WAY BACK, ABOUT 70 YEARS AGO, A CERTAIN YOUNG PERSON WHO CARED ABOUT TREES AND THE QUALITY OF LIFE FOR FUTURE GENERATIONS BEGAN PLANTING TREE SEEDS TO BE GROWN IN OUR PARK. ONE OF THE SEEDS SHE PLANTED WAS YOU! DOES THIS VOICE SOUND FAMILIAR, MS. MAPLE?

(Granny Greenthumb comes out with a shawl around her shoulders and a picture in her arms.)

GRANNY:

I REMEMBER THE DAY YOU FIRST SPROUTED. I COULD TELL THAN THAT YOU WERE GOING TO BE A STRONG AND HEALTHY TREE. (Shows the picture to the audience) THIS IS YOUR BABY PICTURE. YOU STARTED SMALL BUT LOOK HOW WELL YOU'VE GROWN. I'M PROUD OF YOU, ACER. (Stand close to the tree, looking fondly)

ACER:

YOU'VE BEEN WATCHING OVER ME A LONG TIME, GRANNY. WITHOUT YOU AND PEOPLE LIKE YOU WHO LOVE TREES, I'D NEVER HAVE HAD A CHANCE. (Reaches out to touch Granny.)

(Host steps forward to introduce the next character as Granny moves to the arranged place in the background.)

HOST:

OUR NEXT GUEST IS SOMEONE WHO HAS BEEN WITH MS. MAPLE SINCE THE VERY BEGINNING. HE SMILED DOWN ON HER MOST DAYS FROM A VERY HIGH PLACE IN THE SKY, AND HE IS HERE TODAY TO CELEBRATE WITH US. THIS SHOULD BE A FAMILIAR VOICE . . . (Fades back slightly)

(The Sun walks out and stands next to Acer.)

THE SUN:

ACER AND I HAVE BEEN FRIENDS FOR MANY YEARS. (Tilts slightly toward the tree.) WHY, I'VE HELPED YOU GROW OVER THE YEARS BY GIVING YOU MY "SUN ENERGY" SO THAT YOU COULD MAKE FOOD FOR YOURSELF. (Dances a little next to the tree.)

(Acer looks back to the Sun and out toward the audience, saying . . .)

ACER:

THAT'S RIGHT, SUN!! I TAKE YOUR WARM ENERGY INTO MY LEAVES AND USE IT TO MAKE SUGAR THAT GIVES ME GO-POWER. BUT YOU MAKE IT ALL POSSIBLE. (Points to the Sun while making the last statement.)

(Host steps up to introduce next character as Sun moves to the background.)

HOST:

NOW WE HAVE ANOTHER WHO IS JUST AS IMPORTANT TO MS. MAPLE AS THE SUN. SHE HAS PROVIDED WATER FOR HER TO DRINK IN THROUGH HER ROOTS. (Turns toward tree) DO YOU KNOW THIS VOICE, ACER??

RAINCLOUD:

(Moves in from behind the tree and stands next to Acer) OF COURSE YOU REMEMBER ME, DEARHEART. WE'VE BEEN VERY CLOSE FOR A LONG, LONG TIME. SOMETIMES I JUST SIT RIGHT DOWN IN YOUR LEAFY CROWN AND HAVE A GOOD, LONG CRY.

(Acer shifts a little as if looking toward Raincloud)

ACER:

RAINCLOUD! WE HAVE BEEN FRIENDS A LONG TIME, WITHOUT YOU AND THE SUN I WOULD NOT BE HERE TODAY. YOU GIVE ME WATER TO DRINK AND COOL ME DOWN IN THE HEAT OF SUMMER. (Moves upper branches.)

(Host moves forward again to introduce next character as Raincloud moves back.)

HOST:

HOW ARE YOU FEELING RIGHT NOW, MS. MAPLE? THIS IS A DAY OF REAL EXCITEMENT FOR YOU. ALL OF THESE OLD FRIENDS HAVE COME A LONG WAY JUST TO BE WITH YOU . . . AND THERE'S MORE TO COME!!

(Acer looks over toward host and moving her branches says . . .)

ACER:

I AM SO PLEASED BY ALL THIS. MY FRIENDS ARE VERY SPECIAL TO ME. HOW CAN I THANK YOU FOR BRINGING US ALL TOGETHER?

HOST:

WELL, HANG ON TO YOUR LEAVES . . . IT'S NOT OVER YET!! HERE COMES SOMEONE WHO WORKS MOSTLY IN THE DARK AND UNDERCOVER BUT HE'S HERE TODAY JUST FOR YOU.

(Rootie Worm wiggles over to Acer and facing the audience, says . . .)

ROOTIE WORM:

I CAME UP TODAY TO SEE HOW YOU LOOK ABOVE GROUND. I'M USUALLY WORKING AROUND YOUR ROOTS MAKING SURE THERE IS PLENTY OF AIR IN THE SOIL SO THEY CAN BREATHE AND ABSORB WATER.

ACER:

I'M GLAD YOU'RE THERE, ROOTIE, HELPING ME OUT. THE SOIL HOLDS WATER AND IMPORTANT ELEMENTS. I CAN ABSORB THEM INTO MY FINE ROOTS AND SEND THEM RIGHT TO MY LEAVES TO MAKE ENERGY SO I CAN WORK. THE SOIL ALSO HOLDS MY BIG, SUPPORT ROOTS SO I CAN GROW TALL.

ROOTIE WORM:

IT MAKES ME HAPPY TO HELP YOU AND HELP THE SOIL, TOO, ACER.

(After a slight bow, Rootie wiggles off.)

HOST:

THANK YOU, ROOTIE. AND NOW WE HAVE A PAIR WHOSE FAMILY HAS KNOWN YOU FOR GENERATIONS.

(A pair of birds come fluttering in and continue to flutter while they talk. Mr. Robin speaks first.)

MR. ROBIN:

IT'S TRUE, ACER HONEY! OUR FAMILY HAS BEEN BUILDING NESTS IN YOUR PROTECTIVE BRANCHES SINCE MY GREAT-GREAT-GREAT-GRANDADDY ROBIN FIRST CAME TO THIS PARK IN 1966.

MRS. ROBIN:

WHY, MANY ROBIN BABIES HAVE BEEN HATCHED AND NURTURED . . . AND LEARNED TO FLY FROM YOUR TOP BRANCHES. THEN THEY COME BACK AND RAISE THEIR OWN FAMILIES RIGHT HERE OR VERY NEAR BY. WHY, WE'RE GOING TO BUILD OUR THIRD NEST IN A ROW WITH YOU. YOU'VE ALWAYS BEEN SO GOOD TO US AND IT'S ALL RENT FREE.

(As they flutter around Acer says . . .)

ACER:

IT'S ALWAYS MY PLEASURE TO SHELTER THE ROBIN FAMILIES. YOU DO ME HONOR TO CHOOSE ME. TO HEAR YOUR LOVELY SONGS ALL DAY IS PAYMENT ENOUGH.

(As they fly back, the host steps forward and says . . .)

HOST:

HERE ARE SOME VOICES FROM THE PAST THAT MAY NOT BE SO EASY TO RECOGNIZE BUT THEY ARE FOLKS WHO GREW UP WITH YOU.

(A table and chair walk in and stand together.)

PONDER ROSA PINE (THE CHAIR) AND RED SPRUCE (THE TABLE):

(Together they say . . .)

WE SURE HAVE CHANGED SINCE WE LIVED IN THE PARK TOGETHER.

ACER:

YOU DON'T LOOK AT ALL FAMILIAR. WHEN DID WE KNOW EACH OTHER?

TABLE:

WELL, BACK THEN WE ALL LOOKED A LITTLE MORE ALIKE.

CHAIR:

IN FACT, WE ARE YOUR DISTANT COUSINS, RED SPRUCE AND PONDER ROSA PINE. WE LIVED ON THE OTHER SIDE OF THE PARK.

ACER:

(Acer waves upper branches) RED!! ROSA!! NOW I REMEMBER!! CAN THIS BE YOU??

TABLE:

WE WERE SELECTED AND CUT TO BE USED FOR FURNITURE. NOW WE LIVE INDOORS ALL THE TIME . . . TOGETHER . . . IN A KITCHEN.

CHAIR:

BUT WE WOULDN'T HAVE MISSED THIS PARTY FOR THE WORLD!

HOST:

WE ARE NOW COMING CLOSE TO THE END OF OUR SHOW BUT WE HAVE ONE MORE SPECIAL GUEST TODAY. IT'S A FAMOUS FIGURE FROM THE SPORTS WORLD.

(Whitey stands at the edge of the curtain or at the entry of the room out of the tree's line of sight. He doesn't come in right away but says . . .)

WHITEY ASH:

YOU SHOULD REMEMBER ME, ACER. WE GREW UP TOGETHER. WE SPENT OUR FIRST 55 YEARS SIDE-BY-SIDE.

ACER:

OH, NO! THAT CAN'T BE!! IT SOUNDS LIKE WHITEY ASH, MY DEAR OLD FRIEND!!

HOST:

IT IS!! IT'S WHITEY ASH! YOUR CLOSE FRIEND ALL THOSE YEARS AGO BUT NOW HE IS A FAMOUS MAJOR LEAGUE, ALL-STAR BASEBALL BAT. ALL THE WAY FROM ACROSS THE COUNTRY — MR. WHITEY ASH.

WHITEY ASH:

(He comes out, dancing over to Acer.)

ACER, IT'S BEEN A LONG TIME BUT I'LL NEVER FORGET ALL THE TIMES WE SPENT TOGETHER. ALL WINTER IN THE STORMS, AND COLD AND . . .

ACER:

AND THE SUMMERS WATCHING THE CHILDREN PLAY BALL AND THE BOATS SAIL ON THE WATER. NOW YOU'RE FAMOUS AND LIVING FAR FROM OUR PARK IN ANOTHER PART OF THE COUNTRY.

WHITEY ASH:

WELL, I'M ON THE ROAD TRAVELING QUITE A LOT THESE DAYS, SO WHEN I'M IN TOWN I'LL STOP BY AND VISIT. SINCE YOU CAN'T COME TO ME, I'LL COME TO YOU!! (Stands back as the Host comes forward.)

HOST:

SO THERE YOU HAVE IT, FRIENDS! WE GATHERED MANY OF THE FOLKS IMPORTANT TO A SPECIAL TREE'S LIFE. ACER IS SURROUNDED BY MANY OF HER FRIENDS—THOSE WHO HELPED HER AND THOSE WHO WERE HELPED BY HER. LET'S GIVE HER A VERY BIG HAND! **THIS IS YOUR LIFE, ACER MAPLE!!!**

(Everyone applauds as the characters move in and around the tree congratulating her and talking to each other and clapping.)

THE END

ESTA ES TU VIDA, ACER ARCE

The Play in Spanish

REPARTO: Anunciador

Anfitrión de la función - El señor Parques Barquer o la señorita Flor de Cereza.

Invitado de honor - Acer Arce - un árbol que desde hace 70 años crece en el parque.

Amigos y familiares:

Abuelita Dedoverde - quien fué la que sembró la semilla y cuidó de "Acer" cuando era pequeña.

El Sol - quien dió a Acer "energía solar" para crecer.

Nubarrón - quién gracias a su lluvia hace que Acer crezca mucho.

El señor y la señora Petirrojo - quienes han criado sus familias entre las ramas de Acer.

Gusanito de Tierra - quien vive debajo de la tierra y la provee de aire; elemento el cual es muy importante para las raices de Acer.

Pino Ponderosa - es un primo distante y antiguo vecino ahora convertido en una silla.

Abeto Rojo - es también un primo distante y antiguo vecino, ahora hecho una mesa.

Blanco Ceniza - primo también y viejo amigo, quien ahora está convertido en un bate de béisbol en las ligas mayores.

MENSAJES:

1. Los árboles contribuyen a la belleza de nuestros parques y ciudades, refrezcan el calor del verano y también ayudan a mejorar la calidad de nuestro ambiente.
2. Ellos comienzan muy pequeños y crecen más alto que cualquier otra cosa que crezca sobre la tierra.
3. Los árboles toman mucho tiempo para crecer pero viven mucho más tiempo que cualquier otra cosa viviente sobre la tierra.
4. El sol, la tierra y el agua son muy necesarios para que los árboles vivan.
5. Los árboles producen su propio alimento.

6. Los árboles son el hogar de muchos animales silvestres.
7. Muchas cosas que usamos en la casa y en el juego son hechos de árboles.
8. Sembremos más arboles y cuidemos de ellos aprendiendo como ellos crecen.

REPARTO O LIBRETO:

ANUNCIADOR: (en el escenario ó fuera del escenario con la cortina cerrada.)

OLA SEÑORES Y SEÑORAS. AHORA DAMOS COMIENZO A "ESTA ES TU VIDA". UN PROGRAMA DEDICADO A AQUELLOS QUE DENTRO DE NUESTRO AMBIENTE CONTRIBUYEN A HACER DE LA TIERRA UN LUGAR MAS HERMOSO SEGURO Y SALUDABLE PARA VIVIR. PARA CONTARNOS ACERCA DE NUESTRO INVITADO DE HOY Y SU MARAVILLOSA HISTORIA, YO LES PRESENTO A NUESTRO ANFITRIÓN DE LA FUNCION EL SEÑOR PARQUES BARKER/LA SEÑORITA FLOR DE CEREZA (El anunciador da un paso atrás con la mano extendida en forma de saludo y luego aplaude dando así la señal al público de que aplauda también. Luego se pierde de vista.)
(El anfitrión entra, hace una venia a la audiencia la cual ojalá este aplaudiendo.)

PARQUES BARKER/FLOR DE CEREZA, ANFITRIÓN:

BIENVENIDOS AMIGOS A LA EDICION DE HOY DE "ESTA ES TU VIDA" . . .UN PROGRAMA QUE HACE DESTACAR A ALGUIEN ESPECIAL Y SU VIDA NOS HA SERVIDO DE INSPIRACION. LES VOY A PRESENTAR UN ARBOL EL CUAL HA ESTADO VIVIENDO EN NUESTROS PARQUES POR CASI 70 AÑOS. ELLA HA IDO CRECIENDO ALLI SILENCIOSAMENTE, AMPARANDO CON SU SOMBRA A LOS EXCURCIONISTAS, ATRAPANDO BRIZAS FRESCAS, MANTENIENDO NUESTRO AIRE FRESCO Y PURO, Y CONTRIBUYENDO A LA BELLEZA DEL PARQUE AÑO TRAS AÑO. HOY, HACEMOS HONOR A SU VIDA DE SERVICIOS SIN LIMITE PARA SU COMUNIDAD, TRAYENDOLES HOY LA HISTORIA DE SU VIDA. ESTA ES TU VIDA, DOÑA ACER ARCE!!!
(Aquí la cortina se abre dejando ver a Acer Arce quién ondea sus hojas a la audiencia. El [o la] anfitrión da un paso atrás y la aplaude haciendo que la audiencia aplauda también. Acer mira a la audiencia y luego se dirige al anfitrión)

ACER:

MUCHAS GRACIAS SEÑOR BARKER, QUE SORPRESA TAN GRANDE!!! NO SE QUE HACER CON TODA ESTA ATENCION. NUNCA PENSE QUE NADIE ME NOTARA. YO SOLO CUMPLIA CON MI DEBER.
(ondea y mueve sus ramas y hojas frente a su cara, un poco)

(El anfitrión le muestra a ella y a la audiencia el libro que se titula "Esta es tu vida" y lo abre)

ANFITRIÓN:

AHORA BIEN, DEMOS COMIENZO A SU MARAVILLOSA HISTORIA. TODAS LAS BUENAS HISTORIAS COMIENZAN POR EL PRINCIPIO AL IGUAL QUE LA NUESTRA. HACE MUCHO MUCHO TIEMPO, COMO 70 AÑOS ATRAS, MAS O MENOS, UNA CIERTA JOVEN, UNA PERSONA MUY INTERESADA EN LOS ARBOLES Y EN LA CALIDAD DE LA VIDA PARA FUTURAS GENERACIONES, COMENZO A SEMBRAR SEMILLAS DE ARBOLES PARA QUE CRECIERAN EN NUESTROS PARQUES. UNA DE LAS SEMILLAS SEMBRADA POR ELLA FUE USTED DOÑA ARCE, RECONOCE USTED ESTA VOZ?

(Abuelita Dedoverde aparece con una chalina sobre sus hombros sosteniendo un cuadro entre sus brazos.)

ABUELITA:

QUE BIEN RECUERDO EL DIA EN QUE GERMINASTE. YA ME HABIA DADO CUENTA DE QUE SERIAS UN ARBOL GRANDE Y FUERTE. (muestra el cuadro a la audiencia) ESTE ERAS TU CUANDO BEBE. COMENZASTE MUY PEQUEÑA PERO MIRA QUE BIEN HAS CRECIDO. ME SIENTO MUY ORGULLOSA DE TI, ACER. (La Abuelita se para al lado del árbol, mirandolo con ternura)

ACER:

TU HAS CUIDADO DE MI DURANTE MUCHO TIEMPO, ABUELITA. SIN TI Y SIN PERSONAS COMO TU QUE AMAN A LOS ARBOLES YO NUNCA HUBIERA TENIDO UNA OPORTUNIDAD. (el árbol se acerca para tocar a la Abuelita.)

(El anfitrión sale al escenario para presentar su próximo personaje entre tanto la Abuelita se mueve hacia el sitio destinado para ella en el fondo.)

ANFITRIÓN:

NUESTRO PROXIMO INVITADO ES ALGUIEN QUE HA ESTADO CON DOÑA ARCE DESDE EL COMIENZO. EL LE SONREIA CASI TODOS LOS DIAS DESDE SU LUGAR MUY ALTO EN EL CIELO Y EL ESTA AQUI HOY PARA CELEBRAR CON NOSOTROS. ESTA DEBE SER UNA VOZ BIEN FAMILIAR . . . (Se retira un poco de la escena)

(El Sol sale y se coloca al lado de Acer.)

EL SOL:

ARCE Y YO HEMOS SIDO AMIGOS POR MUCHOS AÑOS (se inclina levemente hacia el árbol) PUES YO HE ESTIMULADO SU CRECIMIENTO A TRAVEZ DE LOS AÑOS CON MY "ENERGIA SOLAR" PARA QUE FABRICARA SU PROPIA NUTRICION. (El Sol baila un poquito al lado del arbol.)

(Acer mira hacia el Sol y luego a la audiencia y dice.)

ACER:

ESO ES CORRECTO AMIGO SOL!!! YO ABSORBO SU CALIDA ENERGIA A TRAVEZ DE MIS HOJAS Y LA UTILIZO PARA PRODUCIR AZUCAR QUE ME DA ENERGIAS. PERO USTED TODO LO HACE POSIBLE. (Acer señala hacia el Sol mientras dice esas ultimas palabras.)

(El anfitrión aparece de nuevo para presentar el próximo invitado, mientras el Sol se mueve hacia la parte de atrás.)

ANFITRIÓN:

AHORA VEREMOS A OTRO PERSONAJE TAN IMPORTANTE PARA DOÑA ARCE COMO EL SOL. EL LA HA PROVISTO DE AGUA PARA QUE BEBA A TRAVEZ DE SUS RAICES (volteandose hacia el árbol) SABE DE QUIEN ES ESTA VOZ, ACER???

EL NUBARRON:

(sale por detrás del árbol y se posa al lado de Acer)

PUES CLARO QUE SE ACUERDA DE MI, QUERIDA. HEMOS SIDO MUY UNIDOS DESDE HACE MUCHO, MUCHO TIEMPO. ALGUNAS VECES, YO ME SIENTO SOBRE SU FRONDOSA CUPULA Y LLORO LARGAMENTE.

(Acer se mueve un poco como para mirar al Nubarrón.)

ACER:

NUBARRON! EN REALIDAD HEMOS SIDO AMIGOS POR LARGO TIEMPO. SIN TI Y SIN EL SOL, YO NO PODRIA ESTAR AQUI HOY. ME DAS AGUA PARA BEBER Y ME REFREZCAS EN EL CALOR DEL VERANO. (mueve sus ramas superiores)

(El anfitrión avanza hacia adelante de nuevo para presentar al próximo invitado. Entre tanto el Nubarrón se mueve hacia atrás.)

ANFITRIÓN:

COMO SE SIENTE AHORA DOÑA ARCE? ESTE HA SIDO UN DIA DE MUCHO JUBILO PARA USTED. TODOS ESTOS VIEJOS AMIGOS HAN VENIDO DESDE MUY LEJOS SOLO PARA COMPARTIR CON USTED. . Y LO QUE AUN NOS FALTA!!!

(Acer vuelve a mirar hacia el anfitrión y moviendo sus ramas dice. . .)

ACER:

ME SIENTO TAN COMPLACIDA CON TODO ESTO. MIS AMIGOS SON MUY IMPORTANTES PARA MI. COMO PODRE AGRADECERLE POR HABERNOS REUNIDO A TODOS AQUI???

ANFITRIÓN:

AHORA BIEN, SUJETE BIEN ESAS HOJAS PUES ESTO AUN NO TERMINA. AQUI VIENE AHORA ALGUIEN QUE TRABAJA MAYORMENTE EN LA OSCURIDAD Y ESCONDIDITO PERO HA VENIDO HOY SOLO POR USTED.

(El Gusanito de Tierra se mueve hacia el lado de Acer y dando la carita a la audiencia les dice:)

GUSANITO DE TIERRA:

YO SUBI HOY SOLO PARA VER COMO SE VE USTED POR ENCIMA DE LA TIERRA, YO SIEMPRE ESTOY TRABAJANDO ALREDEDOR DE SUS RAICES ASEGURANDOME DE QUE SIEMPRE HAYA SUFICIENTE AIRE EN LA TIERRA PARA QUE ELLAS PUEDAN RESPIRAR Y ABSORBER EL AGUA.

ACER:

CUANTO ME ALEGRO DE QUE ESTES ALLI PARA AYUDARME, GUSANITO. LA TIERRA MANTIENE AGUA Y ELEMENTOS IMPORTANTES PARA MI. YO LOS PUEDO ABSORBER POR MIS FINAS RAICES Y ENVIARLOS DIRECTAMENTE HACIA MIS HOJAS PARA PRODUCIR ENERGIA Y PODER TRABAJAR. LA TIERRA TAMBIEN SOSTIENE MIS GRANDES RAICES QUE ME DAN SOPORTE Y ASI YO PUEDO CRECER MUY ALTO.

GUSANITO DE TIERRA:

ME HACE FELIZ EL AYUDARLE A LA TIERRA Y AYUDARTE A TI TAMBIEN, ACER.

(Después de una media venia Gusanito sale.)

ANFITRIÓN:

GRACIAS, GUSANITO. Y AHORA TENEMOS A UNA PAREJA QUE LE HAN CONOCIDO POR GENERACIONES.

(Un par de pájaros entran revoloteando y continuan moviendo sus alas mientras hablan. El señor Petirrojo habla primero.)

SEÑOR PETIRROJO:

ES CIERTO, ACER QUERIDA!!! NUESTRA FAMILIA HA CONSTRUIDO SUS NIDOS ENTRE SUS RAMAS PROTECTORAS DESDE CUANDO MI TATARABUELO PETIRROJO LLEGO POR PRIMERA VEZ A ESTE PARQUE EN 1966.

LA SEÑORA PETIRROJO:

MUCHOS PAJARITOS PETIRROJO HAN SIDO EMPOLLADOS Y CRIADOS. . .Y TAMBIEN HAN APRENDIDO A VOLAR DESDE SU COPA. LUEGO ELLOS MISMOS REGRESARON PARA CRIAR SUS PROPIAS FAMILIAS AQUI MISMO O EN LA CERCANIA. PARA NOSOTROS YA SERA ESTE NUESTRO TERCER NIDO CONSECUTIVO QUE CONSTRUIMOS EN SUS RAMAS. USTED SIEMPRE HA SIDO TAN BUENA CON NOSOTROS Y NUNCA NOS HA COBRADO ARRIENDO.

(Mientras los pajaritos revolotean, Acer dice:)

ACER:

SIEMPRE ES UN PLACER PARA MI DARLE POSADA A LAS FAMILIAS PETIRROJO. PUES ME HONRAN AL ESCOGERME. EL ESCUCHAR SUS BELLAS CANCIONES TODO EL DIA ES SUFICIENTE PAGO PARA MI.

(Mientras ellos vuelan hacia el fondo el anfitrión pasa adelante y dice:)

ANFITRIÓN:

Y AHORA ALGUNAS VOCES DEL PASADO LAS CUALES NO VA A SER MUY FACIL RECONOCERLAS PERO SON DE ALGUNOS QUE CRECIERON CONTIGO.

(Una mesa y una silla entran y se paran juntas).

PINO PONDEROSA (LA SILLA) Y ABETO ROJO (LA MESA):

(juntos dicen a la vez) LA VERDAD ES QUE HEMOS CAMBIADO MUCHO DESDE CUANDO VIVIAMOS TODOS JUNTOS EN EL PARQUE.

ACER:

LA VERDAD ES QUE NO LOGRO RECONOCERLOS, CUANDO FUE QUE NOS CONOCIMOS?

LA MESA:

BIEN, PUES EN AQUELLOS DIAS NOS PARECIAMOS UN POCO MAS.

LA SILLA:

MEJOR DICHO, NOSOTROS SOMOS TUS PRIMOS LEJANOS, ABETO ROJO Y PINO PONDEROSA. NOSOTROS VIVIAMOS AL OTRO LADO DEL PARQUE.

ACER:

(Acer mueve sus ramas superiores) ROJO!!! ROSA!!! AHORA ME ACUERDO!!! SERA POSIBLE QUE SEAN USTEDES???

LA MESA:

NOSOTROS FUIMOS SELECCIONADOS Y CORTADOS PARA SER UTILIZADOS COMO MUEBLES. AHORA VIVIMOS ADENTRO TODO EL TIEMPO. . . JUNTOS. . . EN UNA COCINA.

LA SILLA:

PERO NO NOS HUBIERAMOS PERDIDO ESTA FIESTA POR NADA DEL MUNDO.

ANFITRIÓN:

YA PRONTO LLEGAMOS AL FINAL DEL ESPECTACULO, PERO AUN NOS QUEDA UN INVITADO ESPECIAL MAS. ES UNA FIGURA DESTACADA EN EL MUNDO DEL DEPORTE.

(Blanco Ceniza se para al borde de la cortina a la entrada al salón fuera de la vista de los árboles. El nó entra inmediatamente pero dice. . .)

BLANCO CENIZA:

TE DEBES ACORDAR BIEN DE MI, ACER, PUES CRECIMOS JUNTOS Y PASAMOS NUESTROS PRIMEROS 55 AÑOS EL UNO AL LADO DEL OTRO.

ACER:

NO, NO PUEDE SER!!! ME PARECE OIR A BLANCO CENIZA MI QUERIDO Y VIEJO AMIGO!!!

ANFITRIÓN:

ASI LO ES!!! ES BLANCO CENIZA!!! SU VIEJO AMIGO DE TODOS ESOS AÑOS PERO AHORA ESTA CONVERTIDO EN UN BATE FAMOSO DE LAS ESTRELLAS DE LAS LIGAS MAYORES DEL BEISBOL. DESDE LA OTRA COSTA DEL PAIS VIENE EL SEÑOR BLANCO CENIZA!!!

BLANCO CENIZA:

(El sale bailando hacia Acer) ACER, COMO PASA EL TIEMPO PERO NUNCA PODRE OLVIDAR TODOS LOS MOMENTOS QUE PASAMOS JUNTOS. TODO EL INVIERNO, EN LAS TORMENTAS Y EN EL FRIO Y. . .

ACER:

Y LOS VERANOS VIENDO LOS NIÑOS JUGAR PELOTA Y LOS BOTES NAVEGANDO POR EL AGUA. AHORA ERES FAMOSO Y ESTAS VIVIENDO MUY LEJOS DE NUESTRO PARQUE EN OTRA PARTE DEL PAIS.

BLANCO CENIZA:

SI, YO ESTOY SIEMPRE DE CAMINO, VIAJANDO MUCHO EN ESTOS DIAS, PERO CUANDO VUELVA A LA CIUDAD TE IRE A VISITAR. YA QUE TU NO PUEDES VENIR A MI, YO IRE A TI!!! (da un paso atras mientras el anfitrión pasa hacia adelante)

ANFITRIÓN:

AMIGOS AQUI LO TENEMOS. REUNIMOS A MUCHOS DE LOS PERSONAJES IMPORTANTES EN LA VIDA DE UN ARBOL MUY ESPECIAL. ACER ESTA AHORA RODEADA POR MUCHOS DE SUS AMIGOS—AQUELLOS QUE LE AYUDARON COMO TAMBIEN AQUELLOS QUE FUERON AYUDADOS POR ELLA. LES PIDO UN GRAN APLAUSO PARA ELLA. "ESTA ES TU VIDA, ACER ARCE" !!!

(Todos aplauden mientras los personajes se acercan al árbol felicitándola, hablando con uno y otro y aplaudiendo.)

FIN

LIFE, DEATH, AND REBIRTH OF TREES

Slide Show Script and Teacher's Guide

LIFE, DEATH AND REBIRTH OF TREES

Slide Show Script and Teacher's Guide

Children's Version

NOTE: Remarks in parenthesis are for the presenter's information. You may want to prompt answers from the children or provide them yourself. Words in ALL CAPS are important vocabulary words that could be part of further lessons.

1. This is a story about trees. How they grow, how they live, and how they die. Trees are PERENNIAL, WOODY, COMPARTMENTED, SHEDDING plants, usually tall and single-stemmed.

2. A tree begins as a tiny nugget of pure energy called a SEED. When the seed GERMINATES or begins to grow, a small root penetrates the soil and little leaves form on the stem. This is a new beginning.

3. Tree seeds come in many different packages. Some are found in CONES.

4. Some are in what we call nuts. What kind of nuts are these? (acorn). What kind of a tree do they produce? (oak). Can you name some other familiar seed cases? (eg. cherry, peach, and apple seeds, coconut, maple samraras, beans on the honey locust, etc.)

5. A newly sprouted tree can look like this . . .

6. . . . or this (point out tiny evergreens).

7. As a young tree grows, it often struggles for its very survival. Notice how crooked the stem is. Most young trees do not survive in nature. Only a few manage to grow to maturity.

8. Did you know that trees have FLOWERS? Without flowers there would be no seeds. Of course we know about flowers on fruit trees, but most other trees have flowers, too. They come in many varieties. This is the flower of the yellow-poplar or tulip tree.

9. These are the flowers of a eucalyptus tree.

10. The white BRACTS of the dogwood are not flower petals. The actual flowers are the tiny yellow clusters found at the center of the bracts.

11. There are male and female flowers. Sometimes they grow on the same tree, such as the pine tree. Sometimes there is a male tree and a female tree, and sometimes a single flower on a tree contains both male and female parts.

12. These are male flowers or catkins of the oak.

13. Trees have three major parts: CROWN, BOLE, and ROOTS. In the crown we find NEEDLES or LEAVES and BRANCHES.

14. The leaves are especially important because they are the "food factories" of the tree. Some trees are DECIDUOUS which means they lose all their leaves and grow new ones each year.

15. When the new leaves burst forth in the spring. . .

16. . . . they begin to capture the energy of the sun, and when this energy is combined with carbon dioxide and water, the tree produces its own food - SUGAR. This process is called PHOTOSYNTHESIS.

17. Some trees keep most of their needles or leaves all year round. They are called EVERGREENS. Their new spring growth sometimes looks like candles on the tree.

18. When they open, the new, soft needles can be seen.

19. The leaves work hard all summer making food for the tree, some of which is stored through the winter for the growing season next year.

20. The BOLE, or trunk of the tree, supports the crown and holds most of the tree's transport and storage systems. The tree's new WOOD is produced by a thin layer of cells called the CAMBIUM. The BARK covers the cambium and helps to protect the tree from injury. It comes in two layers called the inner bark and outer bark.

21. Bark comes in many colors and textures. When young it is smooth.

22. As the tree ages, the bark usually grows rough and thick.

23. Sometimes the bark looks loose and easy to peel, but peeling the bark can injure the tree and take away its protection.

24. There are two kinds of tree ROOTS: SUPPORT ROOTS and ABSORBING ROOTS. Support roots are strong and woody and hold the tree in the soil. They also STORE food and TRANSPORT water and essential elements.

25. Absorbing roots are fine and not woody. They absorb the WATER and ESSENTIAL ELEMENTS like nitrogen, phosphorus, potassium, iron, and zinc, etc., from the soil to help the leaves produce sugar during photosynthesis.

26. Water and elements are transported through the support roots and the trunk up to the leaves by VESSELS in the wood. When the leaves produce sugar, it is transported down the inner bark. It can be stored in special storage cells called PARENCHYMA in the form of starches and oils.

27. When we look inside a tree with a microscope, we see FIBERS that support the tree, VESSELS, and storage cells called PARENCHYMA. (The parenchyma cells appear in the verticle line called a RAY in the picture. In this ray there are hundreds of tiny cells. Fibers are small and vessels are large circles.)

28. We also see how orderly and organized those cells are. This order is one of the special features that allows the tree to survive to be the oldest and tallest living thing on earth. (These are parenchyma cells, found in a ray, that store energy for the tree.)

29. Trees are injured frequently. They cannot move away from things that would wound them. They do defend themselves <u>after</u> wounding, though, by walling off the infection.

30. When a tree is injured, the wood around the wound changes chemically, setting a boundary around the wound. This chemical boundary resists infection. Notice the color. Trees do not heal as people do. They don't restore injured tissue. Once a tree is wounded, the evidence remains forever. This is why we can read a tree's history in the wood.

31. Broken branches can cause wounds, especially if they are torn and ragged.

32. Sometimes wounds are very serious, but the tree can continue to grow if it is able to contain the infection.

33. A tree can be completely decayed on the inside, but as long as the cambium is protected and still growing, the tree may survive for years.

34. So the tree continues to grow taller and more massive, reaching a great majesty in its maturity.

35. This is a huge Moreton Bay fig tree growing healthy and strong even in the midst of a city.

36. The tree grows from season to season.

37. Eventually it reaches old age. Sometimes it is rather small even though very old, like this 5,000 year old bristle cone pine.

38. Or, it could be quite large, like this eucalyptus from Tasmania.

39. Often trees do not live as long as they should. People are responsible for much of the damage to trees, usually without realizing it. These trees were damaged by salt put on the road in winter snowstorms.

40. This tree was pruned improperly.

41. Not only was this tree planted in building rubble instead of soil, but the bark was also stripped at the base. This is called girdling. It kills the cambium just under the bark and causes the tree to die.

42. Forest trees can be damaged by logging equipment.

43. There may be insects at fault,

44. or sometimes disease,

45. drought,

46. fires,

47. and sometimes we just don't understand why.

48. But eventually the tree will die . . .

49. . . .as all living things do, whether naturally by old age,

50. or by outside forces.

51. Then the process of DECAY begins.

52. The tree returns to the soil and air,

53. helped by many FUNGI.

54. This benefits all of us. The animals find food and shelter,

55. the decayed tree helps to nourish plants,

56. and eventually the old tree becomes part of the new trees.

57. The new young trees grow, and the forest renews itself.

58. Then we can enjoy the beauty and the benefits of trees. The story is millions of years old, and continues today. The more we can learn about trees, the better we can appreciate how important they are to our very survival.

59. This last picture is a Tasmanian eucalyptus, thought to be the largest hardwood in the world. The sign says that the tree is 95 meters tall, about the length of a football field. The tree is 13 meters in girth. Let's get a string and measure to see how big around 13 meters is.

60. This program is presented by the U.S. Forest Service.

"LIFE, DEATH AND REBIRTH OF TREES" SLIDE SHOW
TEACHER'S GUIDE

1. Trees are defined as perennial, woody, compartmented, shedding plants. Perennial is usually defined as lasting several years, but trees live longer than any other living thing. A short-lived tree survives about 40 years. Some trees living now are 5,000 years old. Trees are the oldest organisms on the earth. The length of life depends on the species and the conditions under which the tree lives but an average life span for a tree might be 100 to 300 years. Now that's perennial!

   When we call a tree "woody", we are referring to its structural make-up. Trees are composed primarily of cellulose and lignin. Cellulose fibers make up the cell walls and have great strength, providing the tree with superior support. Lignin is an amorphous material that cements the cellulose cell walls together and provides even more strength. The strength of the wood allows the tree to grow to tremendous heights. With some trees reaching a height of over 100 meters, trees are the tallest living things on earth. Even the largest whale is only 30 meters, and giant kelp grows to only 65 meters. Whales and giant kelp are not subject to the full force of gravity as is the tree. Yet the tree far exceeds their height, while supporting enormous weight, thanks to the superior mechanical support provided by the wood.

   Trees are built up in compartments of cell units. Each part of a tree is a compartment in a sense — the leaves, the branches, the flowers. This compartmentation is part of the tree's survival strategy.

   Shedding is part of the normal life cycle of a tree. At least some of the needles or leaves drop off each year. Branches and twigs are shed regularly. So are fruits or flowers. Bark is sometimes shed, as are absorbing roots and even woody roots. Most trees grow tall and most have a single stem.

2. A seed is a complete, living embryo with a food source, and is protected by a seed coat.

3. & 4. Trees have many different kinds of seed coats and most are very familiar to us. Apple and pear seed coats are called pomes. Cherries, peaches, plums, olives, and avocados are called drupes. Oak, coconut, and pecan trees have nuts. Maple and ash trees have samaras. Legumes or beans are found on locust and caltalpa trees. Of course, pines, hemlocks, spruce, and fir have cones.

7. Think of the 1,000 seeds that a single tree might produce. Of the 1,000, perhaps 250 germinate. Of those, only 100 germinate in a place conducive to survival. Of those, only 25 might grow in a place hospitable enough to let them survive the first 2 years. Given weather conditions, animal injury, insect and disease, and competition from other trees and plants, only five or six might survive to maturity.

8. It might be fun for the children to make a collection of tree flowers. Most trees flower in the spring. The children collect them and key them out with a field guide.

11. & 12. Tree reproductive processes are a study in themselves and might be a whole topic for a class. Holly, yew, and ginkos are examples of trees that have separate male and female trees and are called dioecius. Trees that have separate male and female flowers on the same tree are called monoecius and are oaks, pines, and willows. The conifers do not have what could strictly be called "flowers" but their strobili function in a similar way. Tree flowers that contain both male and female parts are called hermaphrodites. They are found on apple, cherry, eucalyptus, maple, and elm trees.

14. - 16. Here we need to emphasize that trees, like all plants, make their own food, unlike people and other animals, who must eat food to survive. This may open for discussion the subject of photosynthesis. In a sense, the trees are plugging into a star for their energy. Sun energy plays an active part in the energy transformation process. Tree food is sugar in the form of glucose.

17. Conifers may loose up to 1/3 of their needles in the autumn. Many other trees are evergreen, but they are more common in mild climates. These include varieties of oak, a magnolia, citrus trees, coffee and tea trees, breadfruit, papaya, laurel, and even a variety of dogwood.

19. Sugars produced by the tree and not used during the growing season are stored in the living wood cells of the trunk and the roots in the form of starches and sometimes oils, waxes, and resins. Unlike sugar, starch is not water soluble. When needed, the starch is transformed back into sugar for use as an energy source. All of the early spring activity of the tree depends on stored energy from the preceding growth season.

20. Tree wood is sometimes called xylem. Water and elements from the soil are pumped up to the leaves through the vessels in the xylem we saw earlier, where they contribute in the photosynthesis process.

    The cambium is the cell generator for the tree. It produces cells that are not differentiated until the requirements of the tree determine what they will become, eg. wood cells or bark cells. The cambium acts somewhat like the queen bee in a bee colony. Her job is to produce eggs. Whether they will be worker bees or drones or soldier bees is up to the needs of the hive. Cells are produced by the cambium and are held in the cambial zone until they are differentiated.

    The inner bark is sometimes called the phloem. In the phloem, the products of photosynthesis (sugars) flow down through this spongy layer from the leaves to the wood. The outer bark is very tough both physically and chemically. It is the first line of defense for the tree against mechanical injury.

    *Remember that things flow mostly down in the phloem and up in the xylem.

21. - 23. Tree bark comes in many different varieties and colors. Even in old age, the bark of birch and beech is relatively thin. Giant redwood bark can grow to be a foot thick. In some trees, it is constantly being shed as in the sycamores and certain eucalyptus. Sometimes bark grows in thick heavy plates and sometimes in characteristic patterns that make the trees easily identifiable even in winter. The colors range from pure white and orange to shades of brown or gray.

24. & 25. Most trees do not have long tap roots. One notable exception is the tamarugo tree of the Atacama desert in Chile. The tamarugo has a double root system with a tap root that may extend several meters into the soil and absorbing roots only half a meter under the soil that extend laterally from the base of the tree. Most tree roots are found in the top 1/2 meter of soil, whether they are support roots or absorbing roots. The roots spread laterally from the base and may be found far beyond the spread of the branches of the tree, commonly called the dripline.

26. & 27. Vessel cells in trees can be a meter long. In order to do their job transporting water and elements, they must die. Once they are formed they may only live a few hours.

Parenchyma cells are the storage batteries for the tree. It is in these cells that starches are stored. All of the important extra energy is stored in these thousands of tiny, microscopic cells that form both axially and radially. These cells, in contrast to the vessels, can live a long time, up to 50-75 years in sugar maples. They are not usually that long-lived but 7-10 years is common. There are far more parenchyma cells than fiber or vessel cells in a tree. Since they are so tiny, though, they occupy only a small amount of the total volume of a tree. In most wood grain it is difficult to see the rays that contain the parenchyma cells. However, in red oak they are very evident to the naked eye. Slide 27 is probably a red maple in cross section.

Fibers provide the tree with mechanical support. They are extremely strong and can be very long. Fibers may live a few days or a week. It is easy to see that a tree is made up of dynamic materials in various stages of living and dying.

Conifer trees do not have fibers or vessels as such. They have tracheids that do both jobs of support and transport at once.

28. This is a microscopic picture of a ray. You can see all the tiny parenchyma cells lined up almost like bricks. These radial cells provide the connection between the inner bark or phloem and the wood cells or xylem. Have the children go back to slide 26 or the sixth picture on the poster to see if they can identify the fibers, the vessels, and the rays with the parenchyma cells.

29. In this painting, we are showing a tree as if you could see through it. There are several spots where we indicate that the tree has walled off infections. This is not an easy concept to grasp especially in four dimensions (in space and time). The important concept to grasp is that the tree doesn't just stand there. It does react.

30. In this slide, we see a tree that was purposely wounded by drilling a hole into the stem. A year or two later the tree was cut and dissected. Notice the discolored wood. This is the tree's reaction to the wound. The wound itself is not so much of a problem to the tree as the possible infection by disease organisms. So the tree boxes the area around the wound by means of a chemical and physical reaction to contain any infection to the smallest possible volume. The farther from the wound, the smaller the reaction. The three small cross sections or "cookies" are cut, one from the top, one from the bottom and one from just above the wound site. Then the stem is split along the pith lengthwise. Looking at the cookies and the longitudinal cut gives a much clearer picture of the extent of the tree's reaction than the cookies alone would give.

It is sufficient for the children to understand that the tree reacts when wounded, that it resists infections, but that once a tree is wounded it never heals in the human sense. Even if the opening around the wound closes, evidence of the wound remains inside. With a little detective work, a scientist can discover even the week a tree was wounded, not just the year.

Another idea you may wish to encourage is that trees and people have very different survival strategies. One is not better than the other — just different. Human survival strategy depends on our ability to restore, repair, and regenerate tissue in the same position. We come with all our parts, grow to a mature size, and maintain. Sort of patch, patch, patch. Tree survival strategy operates on the premise of generating new cells in new positions. The tree comes from the seed with a tiny stem, a root, and a leaf. It generates new leaves, new roots, and new cells always in new positions. No leaf or branch or root is ever regenerated. If the tree stops growing, it dies. This does not mean that it keeps growing taller; most trees will grow to a maximum height and slow down or just spread out more, but they do keep growing. People do not keep growing, but if we stop repairing and restoring, we die. So, trees are generating organisms and people are regenerating organisms.

34. When conditions are proper, it is possible for trees to survive many centuries. This is a redwood grove.

38. Notice that the man is standing in a fire scar from an ancient forest fire. The trunk of the tree goes far beyond the edges of the picture and is at least 90 meters tall. This tree is in a forest stand that is among the last of the virgin timber stands in the temperate rain forests of the world.

39. These white pines are sensitive to salt injury. Most trees are sensitive, but even for those few that are less so, excessive amounts can be a serious problem.

40. A large lower limb was pruned too close to the trunk of the tree, leaving a large wound. Pruning should not injure the trunk. It should only remove the excess branches while not leaving a stub.

41. Point out the aluminum foil and other trash in the planting hole. Also, be sure the children see the torn bark. Remind them of how fragile the cambium layer is under the bark and how we really should not injure or peel the bark on trees.

42. These trees were damaged by large logging machines in the forest. This is a great problem for the trees right now, but will be a greater problem for the loggers in 10 years when they want to harvest these trees. Their dollar value as logs will be significantly reduced because of these injuries.

43. This is an instar or immature phase of a snout beetle.

47. This is called a burl. They occur on all kinds of trees. They are very highly valued by wood workers for their "figure" or the grain of the wood. No one knows exactly what causes them.

48. This is a drawing of an old beech tree.

49. This is a chestnut snag or dead tree. Chestnuts used to be the dominant tree in the hardwood forests of the East until the chestnut blight killed them. Chestnut trees still grow in the forests, but most do not live to mature size. They regenerate from stumps of old trees and become infected by the disease while still small. They may live as long as 20 years. Some chestnuts growing in the wild are healthy and quite large, perhaps 10" in diameter. Research is underway to develop trees resistant to the disease, so we may eventually see the return of the chestnut.

53. The fungi break down and digest the wood fibers. The wood eventually becomes part of the organic layer of the forest floor along with leaves and other vegetative matter.

59. Have a string or a rope and a meter stick. Measure out a length of string that is 13 meters long (plus a little for a knot). Tie it and spread it out among the children to help them imagine how huge this nearly 100 meter x 13 meter tree really is. How many of them fit inside the area of the tree?

    Imagine trying to climb a tree when the lowest branches are at 15 meters or more. Could you live in the base of a tree if it were partly hollow? In California redwood forests, the pioneers would pen their geese in the fire-scarred, hollow-based trees. Imagine how many houses you might build with just one of these trees. If you did cut it down, how would you do it? How would it feel to cut such a majestic tree? Imagine walking in a forest full of these giants. How do you think you might feel? They could even write a story or a poem about it. Ask if any of the children have visited the redwoods in California or Oregon. All sorts of questions could be explored.

BOOKS, SONGS, AUDIOVISUALS

Books

Grades One to Three:

Adler, David A.: Redwoods Are the Tallest Trees in the World. NY: Thomas Y. Crowell, 1978 (Let's Read and Find Out Science Book)

Bulla, Clyde Robert: A Tree Is a Plant. Thomas Y. Crowell Co., 1960 (Let's Read and Find Out Science Book)

Busch, Phyllis S.: Once There Was a Tree. NY: The World Publishing Company, 1968

Carrick, Carol and David: A Clearing in the Forest. NY: The Dial Press, 1970

Carrick, Donald: The Tree. The Macmillan Co., 1970

Coe, Geoffrey: Trees - The How and Why Wonder Book of Trees. NY: Grosset & Dunlap, Inc., 1981

Jeffers, Susan, Illustrator: Robert Frost's Stopping by Woods on a Snowy Evening. NY: E.P. Dutton, 1978

Jonetos, Hettie: The Tree Stands Shining. Poetry Of The American Indians. NY: the Dial Press, 1971

Smith, George A.: The Apple Tree Community. Great Neck, NY: Channel Press, Inc., 1960

Udry, Janice May: A Tree Is Nice. NY: Harper and Row, 1956

Grades Four to Six:

Baker, Laura Nelson: A Tree Called Moses. Drawings by Penelope Naylor. NY: Atheneum, 1966

Burn, Barbara: The National Audubon Society Collection Nature Series, North American Trees. NY: Bonanza Books, 1984

Earle, Olive: State Trees. NY: Morrow & Co., 1973

Giono, Jean: The Man Who Planted Trees. Chelsea, VT: Chelsea Green Publishing Co., 1985

Milne, Lorus and Margery: Because of a Tree. NY: Atheneum, 1963

Selsam, Millecent E.: Birth of a Forest. NY: William Morrow & Co., 1964

Watson, Aldren A.: A Maple Tree Begins. NY: The Viking Press, 1970

Activity Books

Cornell, Joseph B.: Sharing Nature with Children. Nevada City, CA: Ananda Publications, 1979

Fleugelman, Andrew: The New Games Book. Garden City, NY: Doubleday & Co., 1976

Lingelbach, Jenepher: Hands-On Nature - Information and Activities for Exploring the Environment with Children. Vermont Institute of Natural Science, Woodstock, VT, 1986

Link, Michael: Outdoor Education: A Manual for Teaching in Nature's Classroom. Northwoods Audubon Center, Minnesota

Mitchell, John: The Curious Naturalist. Massachusetts Audubon Society, S. Great Rd., Lincoln, MA 01773

Rockwell, Robert: Hug a Tree. Mt. Rainier, MD: Gryphon House, Inc., 1985

Russell, Helen Ross: Ten Minute Field Trips

Sisson, Edith A.: Nature with Children of All Ages. Massachusetts Audubon Society, Englewood Cliffs, NJ: Philarope Books, 1982

Songs

Billy B Sings about Trees and other songs of the environment. Contact Bill Brennan, Do Dreams Music, P.O. Box 5623, Takoma Park, MD 20912, for records and tapes.

Audiovisuals

This is Your Life, Acer Maple audio-visual package. Includes: slides for Life, Death, and Rebirth of Trees slide show, along with script and teacher's guide; Life, Death, and Rebirth of Trees color poster; and This is Your Life, Acer Maple videotape. Contact Audio Visual Communications, 435 Crooked Lane, King of Prussia, PA 19406, phone (215) 272-8500.

For more information, contact:

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